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EDITED BY J. ADAMS ALLEN, M.D., LL.D., AND WALTER HAY, M.D.

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Original Communications.

ARTICLE I. — *Puerperal Fever in Cook County Hospital.*

The following is a report of a Committee appointed at the regular meeting of the Medical Board of the Hospital, January 31st, 1870, to investigate the causes and management of the recent epidemic of Puerperal Fever in this Hospital, which was read at the regular meeting of the Board, February 28th, 1870, and ordered published in the medical journals of this city, and furnished to the Chicago Medical Society.

T. D. FITCH, M. D., Sec'y Med. Board Cook Co. Hospital.

To the Medical Board of Cook County Hospital:

GENTLEMEN: The undersigned, appointed a committee at your last meeting to investigate the management of the lying-in wards of the Hospital during the prevalence of the late epidemic of Puerperal Fever, beg leave to report: That the resources of our art for the prevention, and in the presence of such epidemic manifestations, may be briefly stated as the following:

1st. Cleanliness of person, and clothing, and apartments of the

lying-in women; ventilation of the wards; disinfection and removal of any sources of putrid effluvia; avoidance of the results of overcrowding; a properly regulated temperature; and appropriate alimentation.

2nd. These means failing to prevent the occurrence of cases of the disease, in addition to them, it now becomes necessary to isolate the patients as promptly and completely as possible, to make the disinfection and ventilation, if possible, yet more thorough; and on failure of these means to arrest the disease among the parturient patients,

3d. It then becomes necessary to vacate the wards, and refuse admission to this class of patients, experience proving that the risk is too great to continue the occupancy.

4th. The disuse of the wards should be for such length of time and seconded by such renovation, cleansing and disinfection as experience proves most efficient in thoroughly removing any real or suspected sources of infection from the wards themselves, the walls, ceiling, floors, etc., and all they may contain of clothing, furniture, etc. The treatment of such cases as do occur, notwithstanding these precautions, is so well settled that it is unnecessary to refer to it in detail; suffice it to say, that the indications to be filled by sedatives, counter-irritants and opiates, and in toxæmic cases eliminants, with such special modifications as particular complications demand, finding their indications in sound pathology and therapeutics, is the practice of the most authoritative names in gynæcological science. In the light of these principles your committee has thoroughly investigated the facts in regard to the late epidemic prevalent in the Hospital, and find they have been fully and faithfully observed. That scrupulous cleanliness, thorough disinfection, isolation of the patients, so far as practicable, and vacation of the wards, were all effected at such times as were proper and necessary. That the whole house has been thoroughly whitewashed twice, and the lying-in wards three times, since these cases began to appear. That such disinfectants as chloride of lime, carbolic acid, spray of permanganate of potassa, and solution of chlorinated soda, have been freely and persistently used. That the methods of treatment put in practice, were such as have already been noted, and that in their results, the most favorable effects were witnessed, notwithstanding formidable obstacles, which we beg

leave to bring to your notice. It is well known by all familiar with the classes of lying-in patients to be found in a pauper hospital, that they are, from the first, in notoriously unfavorable conditions for a safe and normal termination of gestation. The immense majority being either the unfortunate victims of seduction, abandoned to hardship and exposure, depressed and debilitated by moral and physical causes, more or less intense and long continued, or women of abandoned and depraved habits of life, intemperate, and exhausted by venereal excesses and diseases, arriving at the hospital as a last resort, having failed of all other means of existence; while it is the exception and not the rule to meet with women in average favorable moral and physical conditions for the act of childbirth. Under these circumstances, if we add to the gravity of this dangerous disease these unfavorable conditions, we should naturally expect a very high mortality, even with the most skillful treatment, which your committee is happy to announce, in this instance, as being much less than could reasonably have been anticipated.

In effect, from August, 1869, to February, 1870, the period during which the epidemic influence has principally made itself felt, the number of cases of puerperal fever occurring was sixteen, of which ten recovered and six died; a lower death rate than can be shown, under like conditions, in any published report with which your committee is familiar.

And your committee would further and finally report, after careful investigations, that any representations of neglect or mismanagement of this department of the hospital, can owe their origin to only one of two circumstances, viz: ignorance of facts or their willful falsification.

All of which is respectfully submitted.

THOS. BEVAN, *Chairman.*
W. H. BYFORD.
EDWIN POWELL.

W. H. BYFORD,
J. W. FREER,
H. A. JOHNSON,
THOMAS BEVAN,
R. G. BOGUE,
H. M. LYMAN,
T. D. FITCH,
R. C. HAMILL,
J. R. GORE,
JOS. P. ROSS,
EDWIN POWELL,
CHAS. G. SMITH,
H. W. JONES,
JAS. S. HILDRETH,
Board of Cook Co. Hospital.

ARTICLE II.— *Incised and Punctured Wounds of Joints*, by I. N. DANFORTH, M. D., Chicago.

The surgeon of to-day may well be pardoned if he marvels at the comparatively recent origin, and unaccountably slow growth, of "conservative surgery"— in the largest and best acceptation of the term. Through all the ages, nature has been lavish of her examples of her wondrous power to repair injured parts; to preserve mutilated members; and to give continued and permanent usefulness to organs apparently damaged beyond recovery. And yet, how slow have her disciples been to appreciate this fact, and especially to utilize it, and give it practical application.

We sometimes see most palpable and gratifying instances of this conservative power of nature, in the repair of wounds and injuries of joints; parts which, from the complexity of their mechanism, and the low vitality of some of the tissues which enter into their structure, we should expect would only with great difficulty, and with indifferent success, repair themselves, when severely injured. I have chanced to treat several cases of grave injuries of joints, which have recovered with unexpected rapidity and perfection — three of which I propose to place upon record.

CASE 1. Daisy C., a bright little girl of eight years, was, with inexcusably culpable carelessness, allowed to amuse herself by running in front of a mowing machine, while the machine was in operation. She suddenly tripped and fell, and her ankle was caught in the machine, and terribly lacerated. I saw the case about an hour afterward. The foot was dangling by the tendo achillis; both malleoli were hanging by shreds of skin, the astragalus was divided so as to deprive it of its upper half, and the tissues generally, in and about the joint, were, to adopt the inelegant but expressive and strictly truthful language of a by-stander, "badly chawed up." The wound might very properly have been called a *contused wound;* and still, the knives of the machine having just been sharpened, there was not very much bruising of the tissues. Bleeding had been arrested by grasping the leg firmly in the hand. A more unpromising case could hardly be imagined; but, the patient presenting every evidence of a sound and vigorous constitution, I determined to give nature a chance to save the foot, and run the risk of being obliged to perform a secondary amputa-

tion. All detached and damaged fragments of bone (including both malleoli and half of the astragalus) were carefully removed, many shreds of soft tissue were trimmed away, the arteries ligated, the wound brought together by sutures, the limb placed in a fracture box, and water dressing applied. The only remedies given were an occasional dose of morphia, and one drop of the tincture of aconite every three hours — the latter for several days without intermission. I do not relate the progress of the case in detail, because there is nothing to relate. After the third day, no unfavorable symptoms appeared; the wound healing kindly, and the general symptoms calling for no special care or treatment. Passive motion was commenced very gently and carefully in about three weeks. The result of this case was remarkable. The patient was dismissed after six weeks, with a very slight motion of the joint. A year thereafter I saw her again; she was then walking a mile to school and home again, six days in the week, without the least pain or difficulty, and with scarcely appreciable lameness, and she came bounding toward me with all the agility of childhood. I have recently learned (seven years since the accident) that the foot presents a slightly atrophied appearance, but that locomotion continues all but perfect. The points of interest with regard to this case are, that an injury of a large joint, so extensive and disorganizing, should heal almost entirely by the "first intention," and without suppuration; and that the tissues should so accommodate themselves to the new and novel demands made upon them, as to answer, to a great extent, the purposes of an articulation, in face of the fact that a large proportion of the articular surfaces were entirely and permanently destroyed.

Case 2. John H., a stout, athletic youth, aged 18, while indulging in the Yankee luxury of "whittling," plunged the blade of a large "jack-knife" into his knee joint to the depth of about one inch and a half. A copious discharge of synovia ensued, the joint became swollen, hot, and painful, and severe febrile symptoms came on. I saw the case about four hours after the accident. At this time the joint was very painful, and there was much constitutional irritation. There was no hemorrhage, but a continuous discharge of synovia from the wound, which was situated on the anterior and external aspect of the right knee. The incision, which was perhaps three-quarters of an inch in length, was carefully

closed with strips of muslin dipped in collodion, a liberal coating of collodion was applied over the muslin strips, and the limb kept cool by constant irrigation. The patient was ordered to bed, with strict injunctions to stay there, and, the bowels being confined, a "black dose" was administered — the evacuations to be received in a bed-pan, to obviate the necessity of moving the joint. On the following day, the constitutional symptoms were scarcely lessened, but the wound was much less painful. Opium and aconite were prescribed, with a purgative dose of sulphate of magnesia the next morning. From this time, the case progressed slowly but favorably, until about the eighth day, when scarcely a trace of febrile action remained. I now removed the dressings, and found the wound apparently well united throughout its entire length; but the collodion dressing was renewed, and left on for another week. Opium and aconite were given continuously, in ordinary doses, up to the twelfth day, when I relieved the patient at once of my doses and my attendance. The joint remained swollen, somewhat painful, tender and stiff, for several weeks after the patient's dismissal, but after three months had elapsed, was apparently as sound as ever. I should mention that Tincture of Iodine was applied every second day, for several weeks after the removal of the collodion dressing, and that the articulation was at the same time supported by a bandage.

Case 3. J. W., a strong laboring man, aged about 35, while "loading" hay, was wounded in the left knee joint by the "tine" of a pitch-fork in the hands of a companion who was "pitching on." The steel prong passed between the extremities of the bones forming the articulation, a little to the left of the patella, to the depth of about two inches. The patient continued his labor for an hour thereafter, although suffering very great pain. I saw the case on the evening of the same day, about six hours after the injury. At that time locomotion was still possible, though productive of great pain; and at every step a peculiar *churning* sound was heard — if carefully listened for — produced by the admixture of the air which had entered the joint, with the synovial fluid, now much increased in consequence of irritation. There was a copious discharge of glairy fluid, (synovia,) from the wound. I looked upon the case as a grave one, in regard to its possible results, and directed my treatment accordingly. A bandage was tightly

applied from the junction of the lower with the middle third of the thigh *downwards* to the wound, and another one from the same point on the leg *upwards* to the wound, with the intention of expelling the air from the joint by compression. The wound was now carefully closed with collodion and muslin strips, and cold water constantly applied by irrigation. The patient was sent to bed, an active saline cathartic administered, and the patient forbidden to rise under any circumstances. The further progress of the case presented nothing peculiar. It was simply that of a severe case of traumatic arthritis. For several days the joint was extensively swollen, hot and painful, and active constitutional symptoms were of course present. The collodion dressing was maintained, irrigation was persistently kept up, saline cathartics were administered as occasion required, and the pulse held under control by Fleming's Tincture of Aconite. Recovery was quite slow — presenting in that particular a very marked contrast with that of Case 1 — but in the end very satisfactory. Three months after the date of the injury, the joint was apparently sound, although its mobility was very slightly impeded. In six months, the recovery was quite as complete as is usually obtained after acute rheumatism of the knee joint — and perhaps about as rapid.

In the management and treatment of the foregoing cases, it is not claimed that any new discoveries were made, or any wonderful cures performed. They are related simply as cases somewhat out of the usual class occurring in the practice of an ordinary Practitioner; and as affording excellent illustrations of the power of nature to repair parts complicated in their structure and possessing a low degree of vitality.

ARTICLE III. — *A Case of Aneurism of the Orbit.* — By E. POWELL, M. D., Prof. of Military Surgery and Surgical Anatomy, in Rush Medical College.

N. J. K., 12 years of age, from the State of Iowa, consulted Dr. E. L. Holmes, Oct. 29, 1869, at the Chicago Charitable Eye and Ear Infirmary, for a peculiar pulsating tumor of the left orbit. After making a careful examination of the case, Dr. Holmes

referred the patient to my care, with the following history: The patient had always been strong and in good health, and yet not quite so robust as his six brothers and sisters. There was no apparent cause of the disease, either accidental or hereditary. On the evening of August 30, 1869, he was seized with nausea and vomiting, which continued through the night and the following day. This attack could only be ascribed to the efforts required to lift a pail of water quite high, just before experiencing the nausea. About two o'clock, on the morning of September 1st, the patient was seized with an agonizing pain over the left eye. The next morning the parents observed a very great degree of exophthalmos. The globe was immovable and the cornea almost entirely uncovered. The patient suffered constant and intense pain over the eye, with fever, nausea and delirium, during three weeks. At the end of this time the lower lid began to be everted, its conjunctival membrane becoming enormously swollen and red; but the fever and nausea gradually subsided, the latter recurring for a short period every two days. The pain had been controled by the use of quite large doses of morphine. When the patient came to the Infirmary he was pale, emaciated and weak, without appetite, but with no pain, and with only a slight tendency to nausea. The pulse was 110 and very feeble. There was very great exophthalmos, with scarcely any motion of the upper lid or globe. The cornea was partially covered by the lid, and was less sensitive to the touch than normal. The lower lid was completely everted, its conjunctiva being very œdematous and red. The ocular conjunctiva was much congested but not œdematous.

The sound peculiar to aneurism was heard by the ear placed on any part of the head. The characteristic pulsation and thrill were also perceived on placing the finger on the globe, but especially just under the nasal portion of the brow. Compression of the left common carotid arrested this peculiar sound and pulsation.

The central portion of the left cheek was much swollen. On placing the finger in the mouth and grasping the cheek between it and the thumb, the same pulsation and thrill were perceived along the course of the enlarged facial artery.

The pupil was dilated and immovable; vision being reduced to about one-third of its normal distinctness, the field of vision was normal in extent. The ophthalmoscope revealed no pulsation

or appearances differing in the least from those of the opposite eye, in which vision was perfect.

In counsel with Profs. J. W. Freer and H. A. Johnson, the consulting surgeons of the Infirmary, it was decided that the ligation of the common carotid was indicated. The father of the patient, however, would not consent to this operation, and took his son home; but returned with him for an operation January 10th. The pain and nausea had wholly subsided; the appetite, strength and general appearance were excellent. Pulse 75, and strong. The local symptoms remained unchanged, except that the exophthalmos was perhaps slightly increased, and the lower part of the cornea had become somewhat opaque. The cornea was less sensitive to the touch than before. Dr. Holmes stated that no abnormal, intra-ocular appearances could be detected with the ophthalmoscope.

I determined at once to tie the common carotid, and subsequently, in case the aneurism should reappear, by means of hot irons and injections of a solution of lactate of iron, overcome the tumor, as in a similar case, treated successfully, and reported in the London *Lancet*, vol. 2, 1853, in which I had assisted the late Prof. D. Brainard.

The common carotid was ligated January 13th, just below the crossing of the Omo-hyoid. The patient being under the influence of ether, scarcely any blood was lost. The pulsation and thrill in the orbit and cheek ceased immediately. For the first two days the patient's condition seemed most favorable. On the morning of the 15th his mother found that the right arm and leg were totally paralyzed. It is impossible to state precisely when the paralysis occurred, although there were evidences of mental aberration the day before; an examination of his limbs was neglected. On the same day distinct rales were observed throughout the whole chest.

At eleven o'clock, on the morning of the 18th, there was an alarming hemorrhage from the wound in the neck. The patient being placed at once under the influence of ether, search was made for the origin of the hemorrhage. It could not, however, be discovered, although the wound was carefully opened. As no more blood escaped, the wound was re-closed. No further hemorrhage occurred. On the evening of the 19th, the pulsation and thrill re-appeared in the orbit, at first feebly, and then nearly as strong as in the beginning. There had always been a regular discharge

of urine. Evacuations of the bowels were obtained by enemata. Subsequent to the operation the patient had been bountifully supplied with the most nutritious forms of liquid diet. The symptoms of coma, the difficulty of breathing, and the frequency and feebleness of the pulse constantly increased to the day of his death, which occurred January 21st. No autopsy was permitted.

ARTICLE IV.—*Cerebro-Spinal Meningitis.* By THOS. C. MURPHY, M. D., Grand Valley, Ill.

In the April number of the *Journal* is an article calling your attention to the importance of Cerebro-Spinal Meningitis. The Doctor asks you to lay before your readers *all* that is known on the subject. I should say the single word *all* covers a large field. How to distinguish Meningitis from typhoid is another question. Cerebro-Spinal Meningitis should never be mistaken for typhoid fever. The suddenness of the attack, intense headache, absence of febrile movement in the beginning of the attack, headache increasing as the disease advances, and the occurrence of symptoms denoting inflammation of the meninges of the brain and spinal cords, should distinguish it from typhoid fever. In typhoid the attack is gradual; we have diarrhœa, meteorism, iliac tenderness, and the peculiar expression of the countenance, which, once seen, cannot be forgotten. In Meningitis we have tonic contraction of the muscles of the neck and back, rachialgia, convulsions, and delirium, occurring not infrequently. In typhoid fever the rise of temperature is gradual, and reaches 104 degrees Fahrenheit on the fourth day. In Meningitis the onset is abrupt, and the temperature ranges from 100 to 101 degrees Fahrenheit, and never reaches as high as in typhoid fever. Nausea and vomiting are prominent symptoms in Meningitis. The clinical history of the two differ widely.

CAUSES OF MENINGITIS.

During the late war, filth and crowd poisons seemed to be active agents in the production of this disease. Among the soldiers of the U. S. army, recruiting depots were more liable to attack than

were troops in the field; showing that filth and crowd poisons are active agents in producing Meningitis as well as typhoid fever. But the poison of the one cannot produce the other; they are two distinct poisons, and always will be.

PROGNOSIS.

Meningitis must be regarded as a grave disease. Of the number of persons attacked, the majority die; in fact, many cases are struck down at once, as in malignant scarlet fever. Such is the virulent nature of the poison that, at the onset, death steps in during the first few hours of the attack.

MORBID ANATOMY.

(From the Report of the Surgeon General, U. S. Army.)

"There were two classes of cases brought under the observation of this department. In the first, the autopsy disclosed grave anatomical lesion of the cerebro-spinal axis, accumulations of serum, sero-pus, pus or tough yellow lymph, especially in the ventricles about the base of the brain, and in the upper part of the spinal canal. In the second class of cases, no perceptible anatomical lesion in the cerebro-spinal axis was observable. These two groups of cases rest upon equally reliable evidence, and are not to be disposed of on the supposition that the latter represents merely an early stage of the disease. Since, it is to be remarked that both anatomical conditions appear to have been found indifferently, in protracted cases as well as those which prove suddenly fatal." It has been well said of this disease, it is easier to say what it is not than what it is.

TREATMENT.

There is no antidote known to the profession that will counteract the specific ætic poison, nor can it be expelled by elimination. The indications are to stay, if possible, the progress of the disorder, and sustain the vital powers. A hot bath, in which the patient is to remain a short time only, and to be immediately wrapped in blankets, often gives some relief. Hypodermic injections of Morphia are called for when the pain is intense. The bowels should be kept open by cathartics; nutritious food must be given, beef tea, milk, etc. It seems as if the medical dice box has been rattled in vain for a specific (so called) for this disease. One tries blisters

and Belladonna, another tries Potass Bromide. The last seems to be a remedy of some use in this disease, at least it should have a fair trial. Cold to the head is of great value. In cases where there is great depression of the nervous system, the tincture of cantharides is of great value from its stimulant effects, and in such cases it is indicated. (I believe, to Prof. Allen, of Rush Medical College, is due the credit of reviving the use of the tincture of cantharides.) When there are so many agents recommended, I think the physician should use his own judgment, and treat each case according to the indications, and not be crying out for a sign. No sign shall be given ye. As for bringing before the profession all that is known on the subject of Meningitis, one medical journal is too small, and it would not be just the thing. Your correspondent (G. I. S.) can find all he seeks for in some of the practical works on Medicine; say Aitken's, Flint's, Bennett's. Much valuable information can be had from good medical journals. From the above works, a moderate share of knowledge may be drawn, but — the words of the Queen to Solomon — the half has not yet been told, (or some one else said so.)

Why spend valuable time in trying to find out the name of a disease? You cannot treat a disease according to its name or location, but according to what's the matter. Treat according to the indication all the time. Study the clinical history of the two diseases. Make it a point to have a little clinic of your own. Let each case be your hospital. Think; observe.

ARTICLE V. — *Case of Dislocation of Humerus.* By T. A. MONTGOMERY, Medical Student; Mankato, Minn., March 3, 1870.

Mr. D. H. Tyner, ex-sheriff of Blue Earth county; aged 50; healthy. On Saturday, February 12th, while carrying wood up a flight of stairs, he fell backwards; striking his weight on his right hand and arm, which he had thrown behind him, to break his fall. On February 16th, four days after the receipt of the injury, he made his appearance at the office of my preceptor, Dr. W. W.

Clark; stating, as his reason for not coming before, that he did not think the injury serious. He said he had experienced numbness of the hand and arm, from the first; with inability to raise it, or bring it forward across the chest. On examination, the injured shoulder appeared somewhat higher than that of the opposite side. There seemed to be an unnatural prominence of the acromion, with a hollow under it, at the back of the joint; also an undue fullness in front.

The diagnosis was partial dislocation of the humerus, upwards and forwards; the head of the bone lying against the coracoid process.

An attempt was immediately made to reduce it, but, owing to the rigidity of the muscles about the joint, arising from the length of time that had elapsed since the receipt of the injury, it proved ineffectual. He was then allowed about half an hour's rest, when, with the assistance of four strong men, the effort was again renewed. The patient was placed on a low couch and the shoulder fixed by a jacktowel, under the axilla; the ends being placed in the hands of assistants. Another towel was fastened to the arm by means of a clove hitch. In this way extension was made and continued. The surgeon grasping the arm, directed the assistants, while making the extension to raise the elbow toward the face, and at the same time, using the forearm as a lever, rotated it. By persevering in this manner for some time, the reduction was finally accomplished.

I have failed to find but two instances of this dislocation, either in the text books, or in any journal of medical or surgical science.

The patient is now out, attending to his regular business, and is able to use the joint quite freely, although the tendon of the biceps is, undoubtedly, out of the groove.

Moral.—Beware of procrastination.

Article VI. — *Akephaloid Monster.* By N. B. Larsh, M.D., Nebraska City, Neb.

Accompanying this communication, I send you a photograph of an akephaloid monster, resembling in many respects the case

recently reported to your journal by Dr. E. R. Hutchins, of Philadelphia.*

Mrs. H., aet. 32, the mother of four children, all healthy and well developed, was confined at full time, January 16th, last. About four weeks previous to this date she was surprised by the sudden and copious discharge of a large quantity of water, and supposing that labor had commenced or was about to commence, sent for her physician. No further symptoms of labor occurred until the date above named. Dr. Congar, who was called to attend the case, recognized some abnormal deviation in the presenting part, and the labor being tedious, sent for me to assist him.

Before my arrival, however, the mother had given birth to a still-born fœtus, such as you see delineated in the photograph. There was nothing peculiar or unusual in the labor, except, perhaps, an unusually large quantity of liquor amnii. No decomposition had taken place. The fœtus was about the average weight, with limbs well formed.

The head, however, presented the most remarkable deformity. The face and anterior part of the cranium, looking upward, were placed upon the shoulders. The mastoid processes spreading out, were in coaptation with the spine of the scapula on both sides.

From about the fourth dorsal vertabræ there extended upwards a livid surface of denuded, or what appeared to be denuded, muscular fibre, which terminated in a large livid symmetrical tumor, projecting from the cranium. The spinous processes of the vertabræ above the fourth dorsal, were wholly wanting, as was also the bony wall of the cranium from whence the tumor projected.

The external ears projected forward and opened anteriorly, being mere folds of the skin, without the usual helices.

As no dissection of the fœtus was made, the anatomical description is necessarily imperfect.

* The general appearance of this monstrosity is so similar to Dr. Hutchins' case, (*Journal*, Dec. 1869, p. 704,) that the wood cut is thought unnecessary. —Ed.

Epistolary.

My Dear Professor: It is a rimy, juicy day abroad, the east wind bearing the chill of death on its wings, piercing one to the very marrow. We have the "blues" terribly, and as is our custom, fall back upon "Burton's Anatomy of Melancholy," or the "Sorrows and Trials of a Nice Young Man," published somewhere about the middle of the 15th century; old, 'tis true, but replete with much consoling philosophy.

It is with some regret we say, our time has been so occupied with the harrowing cares and duties of life, as to have made it impossible to fill out our "skeleton records" to a proper and suitable article for your valuable Journal. What with fighting duns,—cajoling the determined, and bullying the weak;—staving off executions; pursuing refractory debtors; and "greasing the ways" of those ill in body and mind, for their passage over the "Stygian waters," we have been kept in a perpetual ferment, and have not had that placidity of mind, nor evenness of temper, consistent with connected and coherent thought; so thus the busy hours have sped, sweeping rapidly down the echoing corridors of Time, with saddening, and, may we not hope chastening, influences.

Events, whether professional or otherwise, are constantly transpiring in the life of every one, which, if properly appreciated and interpreted in a true philosophical spirit, must inure to the advantage of society at large; so, for want of better material, we have concluded to give you a few sketches of our wanderings—Asmodeus that we are—since last grasping your brotherly hand.

You may not yet have forgotten the Tipperary man, who with rage in his heart, and whisky in his head, dived down a steep stairway one night, fracturing his skull, besides receiving other contusions, and minor injuries! The flow of blood continued from the external meatus of the right ear, (more or less) for the first week; pulse 55; coma, with stertorous breathing; retention of urine; and involuntary fœcal discharge; partial anesthesia, and palsy of left side; and irregular sluggish pupils—the left much dilated—for at least three weeks longer, and then a gradual lighting up of the ugly symptoms, followed by some febrile reaction, and noisy, night delirium. Well, under constant nursing, and some judicious

handling, he slowly recovered, and now seems possessed of a brighter intelligence than ever before. As he has not been of any account to his family for many years, it is questionable whether any good could accrue to them or society, by allowing him to live, unless, indeed, this severe shock to his cerebral mass may have churned up his dormant ideas to a fitter realization of the duties of life. We have heard of idiots and imbeciles dropping from the upper stories of houses, and losing several ounces of brain matter on the pavement below, thus rendering them more sensible and rational beings. And, *en parenthesis*, may we not say *amigo mio*, that a like process of smashing and extrusion would be of vast benefit to many of our acquaintances?

Again, we were taken by Dr. E. W. Edwards, not long since, to see a natural curiosity, a woman with that perverted condition of the nervous system, known as catalepsy—a religious enthusiasm, the prevailing element—who would not pass her water, and who would not, though she could, talk. Now, just observe this, a "bird who could sing, but wouldn't;" no persuasion of friends, no marital endearments, no entreaties of her physician, were of least avail; her tongue she would hold, and has done it to this very day. Wonderful freak of nature! and there she lay, or sat in her bed, those large melancholy eyes following our every movement, comprehending every expression, but not one word; reticent and determined as a female alone can be, when determined to balk her tormentors. Had she the physical strength, we should have suggested taking her to the museum, or exhibiting her to those windy creatures, with "luminous foreheads," the "Shrieking Sisterhood," as a model *she*, and totally exempt from that prevailing epidemic—the *cacoethes loquendi*—which being freely translated, means a "diarrhœa of speech." We also hinted to our wife to come down and take a look, but she indignantly refused our modest request, stating that she would talk, and liked to talk, and this was one of the prerogatives of her sex, and, bye the bye, this is as near as she ever got to women's rights, and we don't believe she will ever get nearer, if there is any virtue left in leather and sweet oil. Our patient is, however, recovering her health and strength, but still holds her peace; let her pass: and long may she wave—(*not* her tongue).

A few days ago we were requested to appear before one of the

courts, to testify, as an expert, in the case of the People *vs.* Mary Smith, who several months back, in a fit of the frolics, popped away three or more barrels of her revolver at her brother-in-law, thereby doing him severe bodily injury, and endangering his life. As the law does not allow even such frisky females as Mrs. Smith to play with edged tools, she was arraigned by the people, and the plea of insanity, or, to draw it milder, mental derangement from chronic ear disease, was offered in her defense. Drs. E. S. Holmes, and H. R. Smith, both extensively acquainted with aural diseases, were also called to give their opinions, and the former gentleman, on examination of the lady's ears, states the following:

"*Right Ear.*—Tympanal membrane, slightly concave; bright spot, scarcely visible; external meatus, dry; and eustachian tube pervious after two expirations. *Left Ear.*—Same condition, except bright spot more visible; eustachian tube also pervious after two expirations."

Here we have an enumeration of symptoms belonging to many diseases of the ear, but sufficiently significant to frame something of a diagnosis; the sequel of some acute affection, several years past, perpetuated in a chronic form, by a strumous diathesis, or or some other condition of depreciated vitality, attacking not only the external ear, but also the middle, and yet, as her hearing was well preserved, creating no very great pathological changes.

The Judge talked very learnedly upon ear affections, and especially upon the terrors of ear-ache—and after a little confabulation among the lawyers, the plea was allowed; the Judge gave his opinion *ex cathedra;* the doctors drew in their horns, (we were not on hand); and Mrs. Smith was again let loose, to try her hand and her pistol upon her brother-in-law, the next time with perhaps better success.

We desire to say here, that the opinion was a bad one, and no medical man with the light before him, could predicate such, even upon the doctrine of remote sympathies. We grant that ear-ache is a terrible infliction, and know that a woman, with any severe pain, is very apt to become hysterical, cataleptic, lunatic, or any other thing you may suggest, and to crack away with all kinds of implements at the monster man; for example, *vide* any maimed man, with abridged rights — not ourselves, be it understood — but we mildly reject the conclusions of the learned lawyers, of whom

we are none — *te Deum laudamus* — but retain our own from a knowledge of the disease, being doctors — *de profundis clamamus.*

We have lately been relieving the monotony of our lives by perusing the proceedings of the Chicago Medical Society, as published in the *Daily Times.* We have been favorably impressed with their debates; evincing great profundity of learning, extensive pathological research, and much public modesty of demeanor. We think they will compare with the learned meetings of the London and Parisian Societies, not that they generally take so extensive a range, but are very pithy and sententious. And now, while speaking of this Society, let me ask if they did not revise the last "tariff of prices"— a very necessary bill, to govern our charges for attendance upon the ill? We believe we are right, and acknowledge it a very laudable thing; but in our experience, and that not very long since, we discovered that the very framers of that bill, and those most persistent in recommending still higher fees, were the very physicians to under-bid, and would even go long distances for twenty-five or fifty cents, the more especially if they could oust a brother practitioner. And, *apropos* of this, have we not also a "Code of Ethics" under their jealous guardianship? but of what avail? Can there be shown a handful of men in our profession who care one copper for its generous rules, or who would observe a single principle of its laws, if by ignoring them, and injuring one another, they could make a point? No sir! it is the way of the Chicago world. But as we have not time or space to descant further upon this topic, we will leave it for some future communication, premising that we shall attack vigorously the hollowness of all such pretension; aye, even *ad deliquium animi.*

In one of our restless moods, the other night, we dropped into the Opera House to witness the performances of the Fox Pantomime Troupe, and it so forcibly recalled the younger days of our life,— alas, gone forever! — that, for a while, we were positively happy. The clown was excellent, and his gymnastics displayed so much ease, agility, and practiced skill, that each endeavor brought out rounds of applause. The Hungarian brothers, with their ballet dancers, came in every now and then, to fill up, and probably such very active and rapid movements were seldom witnessed. Their legs went through more contortions than a frog's,

under the stimulus of the magnetic fluid; quickness, strength, etc., were the characteristics, but little grace; and how they got through, with such wretched music, is more than we can determine. We suppose, after so exemplary an evening, we were allowed to "crook our elbow," once, at least, and should not be d—d for such a lapse from virtue. But, oh! you pious members of our profession, don't turn up your eyes to Heaven, and pray the gory God, like the Pharisee of old, that you are not one of us. We know you from long experience, and know how many a square drink you take — behind the door, and how many iniquities you commit under the cover of your sanctity. It is much better, if you *will* drink, to do it openly, as a man; to do it in moderation; to throw the word policy, the synonym of hypocrisy, to the winds, and use, not abuse, every blessing vouchsafed to man; at the same time, admitting it a matter of taste with some, and education with others, as our old fathers always taught us to eschew sly tricks, and never to invade forbidden pastures. Farewell, oh! Professor; we shall meet soon again. More anon. "VIATOR."

CHICAGO, April, 1870.

Original Translations.

ARTICLE I. — *The Influence of Electric Currents upon the Nervous System.* By MM. LEGROS and ONIMUS. From Robins' Journal de l'Anatomie et de la Physiologie normale et Pathologique.

EXPERIMENTS UPON PERIPHERAL NERVES—PRELIMINARY.— In reading the majority of authors who have investigated the influence of electricity upon the nervous system, one is struck with the great number of experiments which have been made upon this subject, as contradictions which exist not only between different experimenters, but frequently with the same experimenter. Perhaps no department of science comprises so many opposing facts.

This is readily explained, for the conditions of experimentation are very complicated; it is necessary, indeed, to take into consideration not only the force of currents but even their direction, as well as the functions of the nerve, its state of excitability, and its relations with the nervous centres. By treating each case separately and by citing only the facts which experiment has placed beyond doubt, we hope to be able to reduce all these facts to a few simple laws, which may be readily retained, and which should constantly guide the physician in his therapeutic application.

§ 1.—*The Influence of Continuous Currents upon Motor Nerves.*

We lay down at first, the following principles: When mixed nerves in communication with the spinal marrow are electrized, the contractions may be reflex; it therefore becomes necessary, in order to distinguish clearly that which is due to the direct influence of the motor nerve, to separate the nerve from the cord. It is useless to say that, on the contrary, the nerve should be united to the cord, when the influence of electricity upon the sensitive nerves is to be examined.

A.—*Direct, Centrifugal or Descending Current.*

When upon any nerve, the sciatic for example, the electrodes of a pole are placed in such a manner that the positive pole shall be placed above the negative, a contraction will be observed at the moment when the circuit is closed, and in certain cases, at the moment when the current ceases. During the whole time that the current circulates, there is no contraction unless there should be variations in its intensity.

If a very feeble current is employed, or if the frog is already exhausted, a contraction is obtained only at the moment of closing, and none at the opening of the current.

If the current be of medium intensity, or even if the current be quite weak and the frog very active, a contraction is obtained at the closing, and at the opening of the current. The contraction produced at the opening of the current is always weaker than that which occurs at its close.

B.—*Inverse, Centripetal or Ascending Currents.*

If an inverse or ascending current be caused to act upon a nerve, contraction occurs only at the opening of the current, when the current is weak. When the current is strong, contractions occcur, as in the case of the direct current, both at its opening and at the closing.

Upon measuring with the dynamometer the contractions resulting from the application of an electric current to a nerve, it will be perceived that the contraction excited by the introduction of a direct current into a nerve, is always perceptibly stronger than that excited under similar conditions by the inverse current. (Matteucci.)

By using, at first, a current weak enough to produce no sensible excitation, then by gradually augmenting its intensity, the phenomenon of contraction is first observed when the direct current begins to pass; the inverse current, in order to produce contractions, at the moment of its cessation, must be a little stronger. (Matteucci.)

The direct current, therefore, acts more energetically upon muscular contraction than the inverse. This law explains why, in the experiment of Mariane, in passing the current from one arm to another, the contraction is most energetic in the arm in contact with the negative pole. It is, in fact, in this limb that the current is direct.

The same reason explains the majority of the facts observed by M. Chauveau.

The physiologist has attempted to establish as a law, that the electric current acts only at its point of exit, that is to say, on the side of the negative pole. In this case, again, there should be nervous filaments traversed by the direct current, which fact evidently determines more energetic contractions in the muscles situated near the negative pole.

We may conclude from all these facts that the direct or descending current is that which acts most energetically upon the motor nerve.

§ 2.—*The Influence of Continuous Currents upon Sensitive Nerves.*

Excitation of sensitive nerves can have as its consequence only the phenomena of pain or of contractions by reflex action. In every

case, in order that sensitive nerves may function or determine an action resulting from their excitation, it is necessary that they should be united to the cord. They are, so to speak, in relation to the cord, what the motor nerves are in relation to the muscles; they transmit their excitation to the nervous cells of the cord in the same manner as the motor nerves transmit it to the muscles, and both call into action the elements in which they terminate, and of which they are the natural excitors.

A.—*Direct Current.*

The direct current acts very little upon sensitive nerves; in mixed nerves it excites especially, as we have just said above, contractions in the muscles which receive the branches of the motor nerve. In general, it determines very few of the phenomena of sensibility, at the moment of closing, but very often the contrary occurs at the moment of opening. We shall have to revert to this last action, when we study the currents of polarization from a physiological point of view. The inverse current determines phenomena of sensibility, and, in addition, muscular movements in the back and the upper limbs. At the moment of its application the animal frequently utters cries, and in the case of the frog, as also of the dog, and even in man, there is, in their relations to sensation and pain, a very great difference between the descending and the ascending current.

When the nerve is much exhausted, the inverse current determines but very little action in the sensitive nerve, but its excitability disappears much sooner than that of the motor nerve.

We have endeavored to isolate, completely, the influence of electricity upon the sensitive nerves of limbs. To this end one of us endeavored to utilize the properties of curare, which leaves, during a certain time at least, the sensitive nerves intact, and which does not paralyze the motor nerves of a limb, if by means of a ligature the arterial circulation, and, consequently, the passage of the poison into the tissues of the limb, be intercepted.

By interrupting the access of blood to the right leg in a frog killed by curare, we have thus, in all portions of the body, sensitive nerves capable of transmitting impressions, but there are no motor nerves intact except in the right leg. The contractions of the

muscles of this leg will be therefore purely reflex, if the nerves of the opposite leg, which rests completely immobile, be excited.

By applying a descending current to the sciatic nerve of the paralyzed leg, contractions occur in the healthy leg opposite, at the closing of the current, and none at the opening. An ascending current determined contractions at the opening of the current, and none at the closing. However, during the first moments of the experiment, the ascending current determined especially contractions in the healthy leg, at the moment of closing the current; but these contractions disappeared quite rapidly. Hence, we concluded that reflex contractions were determined by electric excitation of sensitive nerves at the moment of the closing of a descending, and at the moment of the opening of an ascending current. Subsequently, repeating the same experiments, we have discovered in the operative procedure, a condition important to be noticed, and which led us into error. We took every precaution to avoid derived currents. We wiped the nerve dry, placed it upon a perfectly dry piece of glass, separated completely from each other the two sciatic nerves, and consequently believed ourselves to be under conditions the most favorable to obtain contractions purely reflex. But, in spite of all these precautions, the greater portion of the results obtained was due to derived currents, as we perceived more recently. The two legs, instead of being completely separated, were united at their upper portion by the bones of the pelvis. This sufficed to enable the current to circulate from one electrized leg to the other, and to determine derived currents, which induced contractions. By effectually cutting the pelvis, and separating the two legs, these same contractions were no longer obtained, and it was sufficient to induce their reappearance, to extend a moist thread from one to the other.

We shall have to revert to the importance of derived currents; but we shall at once, in this paragraph, establish that we have been wrong in announcing that the descending current determined in nerves purely sensitive, contractions at its closing, and that the ascending current determined them at its opening. The contrary occurs, and the only reflex contractions which we obtain in this case, are those which occurred at the moment of the closing of the ascending current.

Upon nerves of sense, electric currents determine different effects,

according to the nature of the nerve; but the effects produced remain, frequently, during the whole time of the passage of the electricity. When we apply, upon the side of the head, a current of medium intensity, and in nervous persons, even a feeble current, there is experienced in the mouth, during all the time that the current circulates, a very decided metallic taste. Most persons compare this taste to that of iron, and often retain it several hours after electrization. It is difficult to explain the production of this special taste. Is it a peculiar influence upon the nerves of taste, or does it occasion in this case a slight chemical decomposition of the iron enclosed within certain elements of the organism?

Applied in the neighborhood of the acoustic nerve, voltaic currents give origin to phenomena of buzzing, especially in persons a little deaf; these buzzings are uniform during the whole time occupied by the passage of the current.

These phenomena are important, because they prove that continuous currents act upon sensitive nerves during the whole duration of their passage, and not alone at the closing and opening.

The optic nerve manifests the phenomena of phosphenes only at the moment of the application and of the cessation of the current.

The facts which we reported at the beginning of this paragraph, which are elsewhere confirmed by those which we shall examine in the following paragraph, enable us to establish the following law: *The inverse or ascending current is that which acts most energetically upon sensitive nerves.*

§ 3.—*The Influence of Continuous Currents upon Mixed Nerves.*

In a mixed nerve we should recognize the two preceding laws, for we operate, as it were, at the same time upon motor and sensitive nerves: it is thus that we obtain, at once, the contractions to which we have already referred, and phenomena of sensibility, evidences of pain, and reflex contractions in other muscles. The phenomena of sensibility take place especially at the cessation of the direct current and at the closing of the inverse current. By preparing a frog in the manner of Galvani, and by plunging each of its paws into a glass filled with ordinary water, in connection with one of the poles of the pile, the influence of the direction of

the currents upon muscular contractions may be very readily studied. In this experiment, in fact, one of the paws, that which is plunged into the glass in which is the positive pole, is traversed by an ascending, the other, on the contrary, by a descending current. In this case, as was recognized long since by Aldini, Marianini, Ritter and others, in the first moments contractions occur in the two legs at the moment of the closing and of the opening of the current. The contractions at the closing are always more energetic than those which occur at the opening.

When the current is very feeble, and especially when the nerve has lost a little of its excitability, contractions occur only at the closing in the leg traversed by the direct, and the opening in the leg traversed by the inverse current.

These contractions are due to the excitations of the nerves which unite the two legs; that is to say, the electric current acts upon the nervous function, and that the nerves do not serve simply as conductors. Indeed, when the same experiment is made upon a frog poisoned with curare, or in which the nerves have been crushed, these alternations are no longer obtained, and, except by the employment of a very strong current, and by moistening the nerves, no muscular contraction is perceptible. This experiment is likewise one of the most conclusive to demonstrate that the nerve-substance is a bad conductor of electricity; for in this case, its excitability being destroyed, it should act only as a conducting medium; if the nerve be replaced by any other tissue, or by a moistened thread of silk, much more energetic muscular contractions are obtained.

By placing a frog, prepared after the manner of Galvani, astride of two glasses into which are plunged the rheaphores of a pile, besides the alternations of contraction, already indicated, another phenomenon of great value may be observed, as follows: By prolonging the action of the current, all contraction in the limb traversed by the direct current will be seen to disappear, whilst the contraction becomes stronger in the limb traversed by the inverse current. The contraction, which, in the commencement, manifested itself at the closing in the limb in which the direct current circulated, is no longer induced even at the closing, and in the limb traversed by the inverse current, the contraction which occurred only at the opening of the current, is induced now, not only at the opening, but even at the closing.

Moreover, by acting directly upon the nerves with an electric current, or with a mechanical or chemical irritant, it is always demonstrated that the nerve which has been traversed by the direct current has lost its excitability, whilst the excitability of the nerve of the opposite leg, which was under the influence of an inverse current, has not only been preserved, but has been perceptibly augmented.

Hence, *the excitability of nerves is diminished by a direct or descending, and increased by an inverse or ascending current.* As a consequence of this law, we have, moreover, the following proposition, which is further confirmed by experiment: *A nerve fatigued by the descending, regains its excitability by the ascending current, and a nerve whose excitability has been augmented by the ascending, loses it by the descending current,* (Volta, Lehot, Marianini.) In the case of very vigorous frogs, which have been subjected during a certain length of time to the passage of the current, it often happens that the contractions awakened in the inverse limb by the opening of the circuit, is not an instantaneous phenomenon, but a tetanic condition which persists during several seconds, (Ritter.) It is sufficient in this case, in order to arrest the tetanic contractions, to re-establish the primitive current.

The cause of the augmentation of the excitability of nerves, under the influence of the ascending current, depends at the same time upon the nerve and the cord.

In the frog prepared after the manner of Galvani, the nerves of the lower limbs remain attached to the cord, and the excitability of the nerve on the side of the limb traversed by the ascending current may then depend upon the influence of the spinal center. This influence is real, as we have been able to demonstrate. By destroying the cord completely by means of a stylet, and by sending through it, under these conditions, a current from one limb to the other, there was still observed a greater excitability in the nerve traversed by the inverse than in that traversed by the direct current, but its excitability is much less augmented than in the case in which the cord is intact.

The influence of the cord acts, then, to increase the excitability of peripheral nerves traversed by an inverse current: but this augmentation is equally due to the direct action of the electrical currents upon the nerves. Matteucci has made the following experi-

ments: In a frog which exhibited clearly the tetanic condition in the inverse limb at the opening of the circuit, after having left the circuit closed during a certain time, he cut the nerve, either near the spinal cord, or, on the contrary, at the point where it enters into the muscle of the thigh. In the first case, the interruption of the circuit thus produced excited, as usual, tetanic contraction, whilst nothing happened when the nerve had been entirely removed. This experiment proves that the presence of the nerve is necessary to produce this phenomenon, and, moreover, that the direct modification sustained by the nerve is the cause of this tetanic state.

Let us add this fact, which we have determined, and which is important in explanation of the phenomenon, as we shall see further, that when the nerve is cut between the two poles, no contraction, or at least no tetanic contraction, supervenes.

Foreign Correspondence.

PARIS, March 11, 1870.

In the service of Prof. Gosselin, at the Hospital of the Charity, has been, for the last six months, a man about 40 years of age, who had the whole of his right leg severely burned about two years ago; for which, at that time, he entered a hospital, and remained for six months. There being left a wound, about five inches long and one wide, which would not heal, he was then sent to Vincennes, where there is a hospital for men, convalescent, from all the hospitals of Paris. Having remained there a month or six weeks, and feeling strong, he resolved to leave the hospital and begin work. The little wound, still remaining open, now began to enlarge; and finally became so troublesome, that the patient sought aid from Prof. Gosselin. This celebrated surgeon, from the beginning of last October till the middle of March, tried everything possible to make the wound heal. He finally gave up in despair, telling the patient he must leave the hospital, as he could do nothing for him. One of the Internes of the service then proposed to try the autoplastic method, but in a new way.

This latter consists in taking, with a lancet, little pieces of the patient's skin, or of another person's, and putting them on to the wound, where they soon begin to granulate, and around them the skin begins to grow, forming, as it were, little islands of true skin in the midst of the wound. The pieces of skin taken are not larger than the heads of two or three pins taken together, and just thick enough to cause a little bleeding of the part from which they are taken. I examined this patient's leg this morning, and found that the large exposed surface is nearly covered with true skin; and in a very short time he will be completely well, and out of the service. The patient said he felt nothing in the wound. All goes perfectly well.

In doing this little operation, which is certainly much to be recommended, care must be taken that the cut surface of the skin be placed on the surface of the wound, and there maintained with a strip of diachylum till it has formed an union with the part. The ordinary dressing may be placed over the adhesive strip of plaster and rest of the wound.

The Interne, who appears to be the originator of this process, informed me that he had healed in this manner several wounds which had been considered hopeless. Prof. Gosselin has given him three or four patients in his private practice to treat, on whom he had been long uselessly trying to heal their wounds.

I saw, two days ago, Prof. Richet ordering the same treatment for one of these indefinite wounds, result of a burn. He, also, has been trying for months to make the wound heal, and at last gave it up. Being told of this new treatment, he resolved to try it.

It is almost needless to state, that before applying these little pieces of borrowed skin, the wound should first be brought into as healthy a condition as possible; that it would be useless to apply them while the suppuration is very profuse.

As I think of nothing new in the hospitals, allow me to continue with news from the Learned Societies of Paris. At one, M. Onimus presented three dogs, fed alike, and as similar as possible, before beginning his experiments. Two of the dogs were submitted to daily electrical shocks; the third not. The latter, after a short period, was neither so strong nor heavy as the two former; from which he concluded that electricity has a very favorable influence on development and nutrition, and declares the

ascending current to be more effective than the descending. These statements led M. Brown Sequard to remark that he had cited, in 1848, observations which proved that nutrition augments rapidly under the influence of galvanism. By-the-way, Dr. Brown Sequard has been obliged to discontinue his lectures at the Faculty on account of ill health. M. Onimus also said, at the same Medical Society, that, in regard to the two electrical currents, it had been observed, in a physiological point of view, that the continued current has on non-striated fibers a far more powerful action than the currents of induction; thus, the continued currents excite contractions of the non-striated fibers of the intestines, and of the bladder. This, he says, leads one to suppose that, by paralysis, the striated muscular element passed to the state of non-striated fibers. We see, from this, that the two kinds of currents have quite different properties. That, in a theoretical point of view, they may serve as a means of diagnosis, and as means of treatment.

The continued currents permit one to act on the nutrition of paralyzed muscles, especially in cases of facial paralysis, where the use of the currents of induction is quite reserved on account of their influence on the optic nerve. If on a paralyzed muscle no effect is obtained by the current of induction, but a contraction be produced by a continued current, we are to conclude that the nerve, in this case, is primarily affected. This is corroborated by physiological experiments.

Every time that the nerve is first affected in any pathological state, the continued currents have a decided effect. If we have to do with pure muscular atrophy, the currents of induction, on the contrary, should be employed.

The Academy of Medicine is now occupied with the utility and noxiousness of flies. Many interesting facts are brought forth. Among the many experimenters on this part of the animal kingdom, M. Davaine says that he has clearly proved that flies can inoculate the malignant pustule three days after having sucked the blood of an animal affected with this disease; that he is not yet prepared to declare that three days is the extreme limit.

Probably you are well aware that for a long time the Academy was occupied with the important question of the mortality of infants. It appears there are 53,000 annually born in Paris; that 25,000 of them are sent out to be nursed, and at the end of every

year 12,000 or 13,000 of these little Parisians are dead. This, you see, is an enormous per cent. of deaths; and as the Paris physicians are well aware that in Norway, and certain Departments of France, this same mortality is only ten per cent., it is well they should get a little excited over the question.

It also appears, from the report of the Commission, that there are an immense number of women in Paris who conceive, and bring forth children, yet are unable to suckle them on account of the lactiferous organs not being sufficiently active.

M. Piorry, in the discussion, said that, besides the bad alimentation, we must include change of air, and the journey these little ones are obliged to make at so early a moment. He says the infant should not be given to a nurse before the end of fifteen days, thus allowing the child to be more capable of digesting foreign milk, and of supporting the change of temperature, etc. He, moreover, thinks such a proceeding would tend to diminish the accidents of puerperality.

He demands that the peasant women, who are the great majority of the nurses in Paris, should be compelled to receive a certain amount of instruction in regard to their duties, their rights, morality, and hygiene. It is well known — I have seen it myself — that the great majority of Paris nurses are frightfully ignorant; knowing just enough to give their breast to the child, to wash, dress, and carry it about. French infancy is truly cradled — nursed in ignorance.

I find it not astonishing that so many of these little Parisians are born so soon to die, but that even the comparative few survive such an ocean of dangers. Well is it that the Academy have been so long occupied with this vital question; yet sad it is, too, that they have only revived the subject to send it back to the Commission, that a new report may be made. A certain lapse of time must thus pass, when it will be again brought up, for the Academy again to display its well-known oratory.

Two points worthy of notice in the report of the Commission are, that they recommend a change in the Military Institutions of France, and laws against seduction.

A. W. Bosworth.

Editor's Book Table.

[NOTE.—All works reviewed in the columns of the CHICAGO MEDICAL JOURNAL may be found in the extensive stock of W. B. Keen & Cooke, whose catalogue of medical books will be sent to any address upon request.]

A Practical Treatise on the Diseases of Children. By J. FORSYTH MEIGS, M. D., etc., etc., and WILLIAM PEPPER, M. D., etc., etc. Fourth edition (of Meigs on Diseases of Children). Revised and greatly enlarged. Philadelphia: Lindsay & Blakiston. 1870. Pp. 921. $6.00.

From the Publisher's notice we extract:

"Dr Meigs' work has been out of print for some years. The rapid sale of the three previous editions, and the great demand for a new edition, is sufficient evidence of its great popularity; while the very large practice of many years' standing of the author in the specialty of "Diseases of Children," imparts to it a value unequaled, probably, by any other work on the same subject now before the Profession. This present edition has been almost entirely rewritten and rearranged, and no effort or labor has been spared by either Drs. Meigs or Pepper, to make it represent fully in its most advanced state the present condition of Medicine as applied to Children's Diseases.

"The entire work has been subjected to careful revision. Several of the articles, as those on Eclampsia, Chorea, and Parasitic Skin Diseases, have been much enlarged; and others, as the various articles on the Diseases of the Stomach and Intestines, and that on Eczematous Affections, entirely rewritten. In addition, articles have been added upon the following important subjects:

Diseases of the Heart.
Cyanosis.
Diseases of the Cæcum and Appendix.
Intussusception.
Chronic Hydrocephalus.
Tetanus Nascentium.
Atrophic Infantile Paralysis.
Progressive Paralysis, with apparent Hypertrophy of the Muscles.
Facial Paralysis.
Rheumatism.
Diphtheria.
Mumps.
Rickets.
Tuberculosis.
Infantile Syphilis.
Typhoid Fever.
Sclerema.

"The new matter thus added amounts to nearly 200 pages. It has been the effort of the authors, while endeavoring to make the work fully represent the state of our knowledge upon the subjects treated of, to retain its eminently practical character; and with this view, an unusually large amount of space has been devoted to the consideration of the treatment of each disease."

It will be seen from the above that the present is not a mere reprint of the previous work, or with more or less numerous additions. Those who have either of those editions need not be told that they are full of interesting matter; and we are pleased to see

that in this edition improvement is everywhere visible. It is, in fact, so nearly a new treatise, that the possession of any other edition should not prevent purchase of this. We could select chapters, or even take them at random, worth more to the practitioner than what is charged for the work as a whole. It may rank among the most complete of the systematic treatises on the subject. The index is copious, and a glance at it will show the great range of topics considered.

A Practical Guide to the Study of Diseases of the Eye; their Medical and Surgical Treatment. By HENRY W. WILLIAMS, A. M., M. D., Ophthalmic Surgeon to the City Hospital, Boston; etc., etc. Third Edition, Revised and Enlarged. Boston: Fields, Osgood & Co. Philadelphia: Lindsay & Blakiston. 1869. Pp. 422.

To the active practitioner, who has not time to wade through the diffuse descriptions, hair-splitting divisions, and innumerable technicalities which befog everybody except *the* specialists themselves, in the more elaborate treatises on Diseases of the Eye, Dr. Williams' book will prove a welcome relief. It is concise, yet clear and practical. The first chapter discusses the modes of examination of the eye; the second, the Ophthalmoscope; and the third, remedies and their application. Then follow twenty-one chapters on Special Diseases of the organ and its appendages. The Appendix, profusely illustrated, gives a resume of recent advances in Ophthalmic Science. There is a full index, and a number of leaves giving test types, similar to those of Prof. Snellen, of Utrecht.

Manual of Chemical Examination of the Urine in Disease; with brief Directions for the Examination of the most Common Varieties of Urinary Calculi. By AUSTIN FLINT, Jr., M. D., Professor of Physiology and Microscopy in the Bellevue Hospital Medical College, etc., etc. New York: D. Appleton & Company, 90, 92 and 94 Grand Street. 1870. Pp. 82.

The object of this Manual is to furnish facts in convenient shape for the physician, whilst engaged in such urinary examinations as are now daily required of him. The author informs us

that he commenced writing it merely to accompany a set of tests, etc., which Messrs. Tieman & Co., the eminent instrument makers, were arranging for the use of physicians, but it insensibly expanded to its present dimensions. It cannot be expected to take the place of the elaborate treatises, but is well adapted for the purpose set forth in the title page. A series of tables are given, which add much to its convenience and adaptation to use.

A Practical Treatise on the Diagnosis, Pathology and Treatment of Diseases of the Heart. By AUSTIN FLINT, M. D., Professor of the Principles and Practice of Medicine and of Clinical Medicine, in the Bellevue Hospital Medical College, etc. Second Edition; Thoroughly Revised and Enlarged. Philadelphia: Henry C. Lea. 1870. Pp. 550.

On the appearance of the first edition of this work, we cordially recommended it to the profession as "full, accurate and judicious." It is not too little to say, that "it stands at the head of all treatises on the subject." It is a standard text book in all the colleges, and is everywhere endorsed by the profession. The second edition has been carefully revised, many additions and alterations made, and much has been rewritten. The author states that the basis of the revision has been an analysis of about 450 cases recorded by him since the publication of the first edition. Without remembering any other of the valuable contributions of Prof. Flint to the literature of the profession, this book alone would rank him among its master minds and chief benefactors.

A Hand-Book of Operative Surgery. By JOHN H. PACKARD, M. D., One of the Surgeons of the Episcopal Hospital, Author of a Manual of Minor Surgery, etc., etc.; With 54 Steel Plates and Numerous Illustrations on Wood. Philadelphia: J. B. Lippincott & Co. 1870. Pp. 211.

It was the object of the author to illustrate, by at least one good method, every surgical operation in general use at the present day. In numerous instances, optional methods are given. It is strictly a manual of operations, no reference being made to diagnosis or treatment, except so far as they should influence the adoption or choice of operative measures. Directions and illustrations are

based on the experience of the author in hospital and private practice, together with observations on the operations of others, and further correctness assured by careful comparison with standard works. Every form of instrument required by the surgeon is described and shown by cuts. As a whole, the book fills a place previously unoccupied. A vast amount of information is concisely and perspicuously set forth in the text, and the steel engravings (by Illman & Son,) are excellently well adapted for their purpose. The book will be found very convenient even by those who have been in long practice, and are in possession of the larger systematic treatises. To the younger surgeons and students it is invaluable. We most heartily recommend it to our readers. It is just the thing to glance over at the emergency so often occurring to the surgeon.

The Preventive Obstacle, or Conjugal Onanism; the dangers and Inconveniences to the Individual, to the Family, and to Society, of Frauds in the Accomplishment of the Generative Function. By L. F. E. BERGERET, Physician-in-Chief of the Arbois Hospital (Jura); translated from the third French Edition, by P. DEMARMON, M.D., 1 vol. 12mo., cloth, $1.50. Mailed on receipt of price; TURNER & MIGNARD, publishers, 109 Nassau street, N. Y.

With regard to this book the publishers remark:

"This Work, which has reached a third edition within a year in France, treats of a subject hitherto neglected by medical writers; but of the highest importance, whether from a medical or from a social point of view. Not only every physician, but every one interested in social science, should read attentively the facts and conclusions set forth by the author as the results of an exceptionally wide experience."

Aside from a certain tendency to exaggeration, and the attributing to *frauds*, what in many of the cases cited is clearly attributable to excess and other causes, this monograph is certainly worthy of perusal, and may afford valuable suggestions to physicians. We should say, "It is of the French, Frenchy," if Dr. Storer's "*Why Not?*" and "*Is it I?*" did not remind us that these things are getting naturalized in Yankee land.

Pamphlets.

On the "Sedative" Action of Calomel in Disease. By FREDERICK D. LENTE, M. D., Cold Spring, N. Y. Read before the Duchess Co. Medical Society, N. Y., Jan 12, 1870. Pp. 24.

This is an attempt to induce practitioners to seek the well-known "sedative" action of Calomel, when given in scruple and half-dram doses, or even *plus* this. The double-action, stimulant, (energizer of tissue metamorphosis,) and sedative, (diminisher of the same,) Calomel enjoys in common with a multitude of other remedial agents. It is an action that has been often sought with success, just as blood-letting, prostration by tartar emetic, and narcosis by opium have often proved successful, or at least have been followed by recovery from disease. Dr. Lente gives his experience in the use of Calomel, in sedative doses, in epidemic dysentery, membranous croup, cholera morbus, and refers to its similar use by others in Asiatic cholera, pneumonia occurring in a tuberculous patient, &c., &c. He says that he is as much opposed to its indiscriminate use as an alterative, that is, in minute doses, with a view to mercurialization, as almost any one can be — doubts its prophylactic power in primary syphilis, and thinks that, with the powerful modern remedies which enable us to promptly act on the nervous system, and control the action of the heart, Calomel, as an alterative at least, is unnecessary in all forms of fever, in most diseases of the liver and alimentary canal, and also in peritonitis, iritis, pericarditis, and allied affections. In his view, the abuse it has received from those who have employed it or vituperated it, should not prevent us from using it in certain diseases of a more than ordinarily dangerous character, where other agents are ordinarily futile. Dr. Lente is especially enthusiastic in his commendation of sedative doses of Calomel in membranous croup, and adduces several unmistakable cases which recovered after taking repeated doses, varying from twenty grains to a teaspoonful each. "In fact," he says, "it is well to bear in mind, when using the 'Calomel treatment,' that there is more danger in giving too little than too much, or, (to speak definitely,) in giving less than twenty

grains than a little over thirty." Half an ounce has been thus given, to a delicate child, in three or four days, and perfect recovery followed. "There does not appear to be such a thing as a *poisonous* dose of Calomel." The writer attributes its beneficial influence, principally, to reflex action — something, perhaps, due to its lessening the plasticity of the blood, and something to its relieving hyperaemia of the mucous membrane.

We do not imagine that the practical application of the teachings of this monograph will widely prevail, and therefore we omit the earnest protest which otherwise we should deem necessary.

Such a practice is based on the baldest empiricism, and the evidences of its success are, in a scientific sense, no more worthy of confidence than the countless "cures" which have, from time to time, been attributed to agents and methods of the most antipodal character. The newspapers are full of such things, and even the Homœopathists rely upon their medical multiplication table.

Proceedings of the Homœopathic Medical Society of Ohio. Fifth Annual Session. 1869.

Mineral Wealth of Missouri. I.—Mines and Mining Education. II.— Coal and Iron. By. Prof. C. D. WILBER, Inspector of Mining Lands. Fifth Thousand.

The Annals of Iowa. Published Quarterly by the State Historical Society at Iowa City. January, 1870. Edited by the Corresponding Secretary. $1.00 a year. Address F. Lloyd, Iowa City, Iowa.

Twelfth Annual Report of the Chicago Charitable Eye and Ear Infirmary. Presented by the Surgeons for the year 1869.

Eight hundred and seventy-three cases were treated at this institution during the year 1869 — making an aggregate of 5,355 since its first opening, in 1858. From the report we extract:

Consulting Surgeons — PROF. J. W. FREER, M. D.; PROF. H. A. JOHNSON, M. D. Attending Surgeons — EDWARD L. HOLMES, M. D.; EDWIN POWELL, M. D.

This Institution is not an Asylum for the hopelessly blind or deaf, but an Infirmary for the treatment of the poor, suffering from curable diseases of the eye and ear.

Communities, therefore, should not be at the expense of sending cases,

which are not curable, to the Infirmary. The Trustees have no funds to appropriate for the traveling expenses of patients on their return home. They can, however, furnish clothing for a limited number of patients.

The State of Illinois in 1867, and again in 1869, appropriated $10,000 for the support of poor patients at the Infirmary. The Governor of Minnesota has at his disposal a small sum for patients of this class at the Infirmary, receiving treatment for diseases of the eye contracted during the late war. The Trustees have also a limited sum for the support of indigent sailors and soldiers.

As the funds of the Institution are insufficient for the constant maintenance of a large number of patients, it is hoped that communities in the State of Illinois, from which patients are sent for treatment, will each contribute a small sum of money to meet a part of the cost of their support while at the Infirmary. This will enable the largest possible number of poor to receive the benefits of the fund appropriated by the Legislature. Patients not residing in Illinois, must pay for their board during the whole period of their treatment.

Patients from Illinois are admitted for both gratuitous board and treatment, on furnishing written certificates of their indigent condition, either from their physicians or from a supervisor of the county or town where they reside.

Patients from Illinois (or other States when there are vacant rooms), are admitted for gratuitous treatment who bring similar certificates that they can pay for their board alone, but not for their treatment.

For the cost of the annual repairs of the Infirmary building, furniture, bedding, and other incidental expenses, the Institution is dependent upon funds raised by private contributions.

During the past year, an extension to the Infirmary building has been constructed, at considerable expense, to provide additional accommodations and comfort for the increasing number of patients. The Infirmary is more than ever in need of aid from the public.

Donations of money, fuel, furniture, and provisions, are, therefore, most earnestly solicited in aid of this charity.

The Infirmary is located at 16 East Pearson Street, first street north of Chicago Avenue, near the corner of North State Street, in a healthy portion of the city, near the lake, and is provided with all the conveniences necessary for the comfort and welfare of its patients.

The Dispensary of the Infirmary is open daily from 2 to 2½ P. M. for such poor patients, not boarding at the Infirmary, as may require treatment.

Intermarriage of Kindred. Consanguineous Marriages not Forbidden by Moral or Physiological Law. Evils of Connubial Alliances between Persons of Diverse Race. Annual Address before the Eclectic Medical Society of the State of New York, January, 1870. By ALEXANDER WILDER, M. D., President of the Society. Pp. 32.

On the Physical Basis of Life. By T. H. Huxley, LL. D., F. R. S. University Series No. 1. New Haven, Conn.: Charles C. Chatfield. 1870. Price, 25 cents.

This is the first of a series of Educational and Scientific Lectures, Addresses and Essays, now in process of publication, at the office of the College Courant, (Yale,) New Haven. No. 2 (in press) is on the Correlation of Vital and Physical Forces, by Prof. Geo. F. Barker, M. D., of Yale College. Price, 25 cents.

The author of the present lecture adopts Protoplasm as the physical basis of life, whether animal or vegetable. This material, so far as form is concerned, is entirely homologous in plants and animals, and in many cases it is a mere matter of convention whether we call a given organism an animal or a plant. The gist of Huxley's doctrine is in this sentence: "If the properties of water may be properly said to result from the nature and disposition of its component molecules, I can find no intelligible ground for refusing to say that the properties of protoplasm result from the nature and disposition of its molecules." Regarding the charge of materialism urged against his views, he argues with an ingenuity which will command attention:

"If we find that the ascertainment of the order of nature is facilitated by using one terminology, or one set of symbols, rather than another, it is our clear duty to use the former, and no harm can accrue so long as we bear in mind that we are dealing merely with terms and symbols. In itself it is of little moment whether we express the phenomena of matter in terms of spirit, or the phenomena of spirit in terms of matter; matter may be regarded as a form of thought, thought may be regarded as a property of matter — each statement has a certain relative truth. But with reference to the progress of science, the materialistic terminology is every way to be preferred."

But we have not space for the quotations which are suggested upon every page. Those who are thinking on these great questions should carefully peruse this production as a whole.

Non-Professional Exchanges.

Harper's Magazine, Harper's Weekly, Harper's Bazar.—Harper's Magazine is undoubtedly, as claimed, the best sustained work of the kind in the world. Apart from its illustrations, it contains from fifty to one hundred per cent. more matter than any similar periodical issued in the English language. It is peculiarly an evidence of the culture of the American people, not in the narrowed interpretation given to the word culture, in Boston, and exemplified in the very wet *Atlantic*, where minnows do much more abound than whales, but in the peculiar combination of "the racy monthly, the more philosophical quarterly, blended with the best feature of the daily journal." The *Weekly*—"A complete Pictorial History of the Times," and the *Bazar*, "A Repository of Fashion, Pleasure, and Instruction," are respectively the models which a host of publishers attempt to imitate, but none have yet equaled. Each of these periodicals is afforded, in consequence of their immense circulation, at the extraordinary low price of $4.00 per year; two of them at $7.00, or all of them for $10.00; address Harper & Brothers, New York.

Our publisher will furnish either or all of the Harper periodicals at club rates with the *Journal.*

College Courant.—Yale, New Haven, Connecticut. This is a weekly paper edited and published by CHAS. C. CHATFIELD, A.M., assisted in the Scientific Department by Prof. G. F. BARKER, M.D. It is a handsomely printed sixteen page quarto, and is afforded at $4.00 a year; single copies, ten cents. It is not merely, as the name might suggest, an organ or exponent of Yale College, but gives us the current news of collegiate life throughout the country. Condensed accounts of both literary and scientific progress, and elaborate papers from men of letters and distinction, render it a valuable means of intercommunication of thought and knowledge. On another page we have noticed a series of lectures now in progress of publication by the same publisher.

The American Builder, of this city, sustains admirably, the high reputation it has achieved in arts, architectural and general.

It is not only a paper for architects, but for all persons interested in building. Our friends who contemplate the erection of homes or their ornamentation or improvement, would get many valuable hints by subscribing for the *Builder*. But what calls for the present notice is the beautiful premium engraving, offered by the publisher to subscribers, for the present year. It is a splendid 24 by 32 inch fine line engraving on heavy plate paper, of Washington Irving. Drawing by Darley, engraving by Ritchie. It is really a magnificent work of Art. The plate is new and the picture cheap at thrice the price asked both for it and the *Builder*. Address, with $3.00, Charles D. Lakey, publisher, 113 and 115 Madison street, Chicago.

The Arts—Devoted to Science and Arts. April number, 1870, (Vol. 1, No. 2.) This is a new periodical, published monthly, in this city, by Jos. M. Hirsh & Co., Nos. 10 and 12 South Water street. Subscription price, $1.00 per year. From a glance at the table of contents, it will be seen that readers are invited to a pleasant *melange* of art and science. The present number contains a portrait and sketch of Thomas Graham, the eminent Scotch chemist. We wish *The Arts* success.

The European Mail.—A weekly summary of news for North America; usual contents:

"Accidents; Art and Science; Births; Marriages, and Deaths; Commercial Summary; Correspondence; Court; Criminal; Emigration; Foreign and Colonial; Gazette; General Summary; Imperial Parliament; Ireland; Latest Shipping; Legal; Literary; Market Reports; Medical; Mercantile; Military; Miscellaneous; Music and the Drama; Natural History; Naval; Obituary; Political; Prices Current; Scotland; Shipping and Freights; Special American Notes; Sporting; Stocks; and Shares; Wills and Bequests, etc., etc. Subscriptions, payable in advance, 17s. 4d. per annum, inclusive of postage. Address the Proprietors *European Mail*, Colonial Buildings, 44 A, Cannon Street, London, E. C. (Postage pre-paid.")

From several copies of this paper which we have received, we are enabled to recommend it to those taking interest in foreign affairs.

Editorial.

Ubique Gentium?

Mr. Leckey, the author of the masterly "History of European Morals"—a work which every thinking man should not only read but ponder well—a work which may rank among the highest productions of the cultured intellect, of the last quarter of a century, enunciates with regard to the medical profession these views, which are probably to be accepted as the deliberate sense of very many, if not of the majority, of the thinking men, the men of culture, (non-professional) of the present time.

"Of all the great branches of human knowledge, medicine is that in which the accomplished results are most obviously imperfect and provisional, in which the field of unrealized possibilities, is most extensive, and from which, if the human mind were directed to it, as it has been during the past century to inventions, and especially to overcoming space, the most splendid results might be expected. Our almost absolute ignorance of the causes of some of the most fatal diseases, and the empirical nature of nearly all our best medical treatment, have been often recognized. The medicine of inhalation is still in its infancy, and yet it is by inhalation that nature produces most of her diseases, and effects most of her cures. The medical powers of electricity, which of all known agencies bears most resemblance to life, are almost unexplored. The discovery of anæsthetics has in our own day opened out a field of inestimable importance, and the proved possibility, under certain conditions, of governing by external suggestions the whole current of the feelings and emotions, may possibly contribute yet further to the alleviation of suffering, and perhaps to that Euthanasia which Bacon proposed to physicians as the end of their art."

Mr. Leckey discusses then the relations between our physical and moral nature, and suggests that, with the complete information it is possible to acquire, we may treat the many varieties of moral disease as systematically as we now treat physical diseases.

Sir William Hamilton, another eminent thinker of the present time, curtly characterizes the history of medicine as a "History of Variations."

Medical scholars, themselves, in looking over our records, have not infrequently made use of indignant and almost despairing sentences—even harsh and coarse objurgations, at the fickleness of

opinion, the contradictory statements, the multiform hypotheses, the myriad "remedies," the acrimonious disputes, the vehement sarcasms and loud ridicule which have chased each other through all the bewildering mazes of professional history. Of course these hasty expressions, having little more to do with the argument than exclamation points in punctuation of a book, are greedily caught up by the advocates of exclusive and dogmatic "new systems of practice;" and even philosophical and cultivated minds are apt to attribute to them an importance and weight utterly beyond their real value. Montaigne, who had "the stone," and found no relief from the physicians of his age, railed at the whole fraternity, and every little essayist and popular lecture maker, since, has imitated this great master of the sixteenth century, forgetting that the world is three hundred years older. Montaigne recognized the mistakes into which the physician must almost of necessity fall.

"He has need of too many parts, considerations, and circumstances rightly to adjust his design; he must know the sick person's complection, his temperature, his humors, inclinations, actions, nay, his very thought and imaginations; he must be assured of the external circumstances, of the nature of the place, the quality of the air, and season, the situation of the planets, and their influences; he must know in the disease, the causes, prognostics, affections, and critical days; in the drugs, the weight, the power of working, the country, figure, age, and dispensation; and he must know how rightly to proportion and mix all these together, to beget a just and perfect symmetry; wherein if there be the least error, if amongst so many springs, there be but any one out of order, 'tis enough to destroy us. God knows of how great difficulty most of these things are to be understood."

But the trouble is not alone of what physicians should, but do not, know, for as old Thomas Browne wrote :

"For, what is worse, knowledge is made by oblivion; and to purchase a clear and warrantable body of Truth, we must forget and part with much we know." * * "Wise men cannot but know, that Arts and Learning want this expurgation; and if the course of truth bee permitted unto its selfe, like that of Time and uncorrected computations, it cannot escape many errors, which duration still enlargeth."

And these latter hit exactly the pith and marrow of the subject. So long as diseases were considered as entities, as devils to be cast out, and symptoms as the manifest strivings of these devils with

the possessed organ or body, just so long would continue the search for mysteriously operating agents, or charms, or as the later word to express the same idea is, specifics. Even LORD BACON fell into this identical error, notwithstanding his usually clear insight of the methods of discovering truth, as is instanced in the often quoted sentence; complaining that physicians neglect efforts to discover particular remedies having a peculiar and especial relation to particular symptoms and diseases. Mr. Leckey, by his reference to inhalations, electricity and anæsthetics, in the passage quoted, evidently looks for the same thing, only he wants us to discover for him some specifics for moral diseases—some "Morrison's Pill" (as Carlyle has it) for disorders of the psychical part, both of individuals and the commonwealth. The thought was anticipated by Macbeth—which see, for there it is in Scene III, Act V.

BROUSSAIS characterized this idea in medicine as *Ontology*, and his explanation, half a century ago, shows now, as then, why much of medicine, so called, remains in darkness and uncertainty.

"The group of symptoms which are given as diseases, without referring them to the organs, on which they depend, or referring them to the organs without having well determined the nature of the physiological aberrations of these last, are metaphysical abstractions, which do not represent a constant, invariable morbid state, of which we can be sure of finding the model in nature; they are then factitious existences, and all who study medicine by this method, are *ontologists*.

"To consider these factitious morbid existences as injurious powers, which, act upon the organs, and modify them by producing such or such a disorder, is to mistake effects for causes; is ontology. To consider the succession of symptoms which have been observed, as the necessary and invariable progress of the disease, and to derive from them characters essential to their diagnosis, and consequently to their treatment, is to create a factitious being; since the affections of organs are different, according to the modifying powers which act upon them; it is placing ourselves in the impossibility of treating the disease before its termination, without contradicting our own principles. This is always ontology."

About everybody in these days will disclaim ontological views with regard to disease, but its nomenclature contaminates the books, and infests the language of professional life. The physician of highest culture brought face to face with a sick man, will, involuntarily, perhaps, nevertheless in fact, look upon the disease as a personality, to be dealt with as an enemy. The whole enginery of formularies reeks with it.

From a pamphlet before us, the valedictory address at Jefferson Medical College, March, 1870, by J. AITKIN MEIGS, M.D., Prof., etc., we extract these sentences:

"To the reflecting mind it is evident that medicine is now passing through a chaotic phase in its own career. The day of blind obedience to authority is at an end. No asserted fact, no theory, however plausible, finds its way to acceptance on account of the great name attached to it, but on the contrary, it is immediately tried in the crucible of experiment, observation, and induction. But medicine, in becoming scientific, has grown sceptical. The twin brothers Doubt and Disbelief are even now pulling up, and with no gentle hand, the ancient landmarks all around us. The iconoclasts are at work. Opinions and conclusions are being sifted so fiercely that we at length stand face to face with the danger of denying altogether the accumulated experience of our fathers."

Language like this could not have been used without imperiling the professional *status* twenty years ago, but it is central truth, and the writer, in current phrase, strikes the hard-pan or bed rock, in speaking of the reconstruction of the philosophy of medicine and placing it upon a sure scientific basis.

"This basis, it is now beginning to be seen, is to be made up of the accumulated facts relating to the chemical circulation of matter, the conservation of energy, and the development of organic forms by natural selection."

We are moving on — falling into the line of the world's progress, by no pitiful discoveries of specifics, big or little; no dubious inhalations, electrical wonders or anæsthetic stupefaction, such as Mr. Leckey hints to be the guide-boards of advance.

We do not argue here, yet do not in anywise admit that medicine has lagged behind other sciences, whether of locomotion or other. Hygiene and philosophical prophylaxis did more to ensure success in the late war than even railroads or improved guns.

We are able to say positively, to malignant epidemics, which once swept away population by the millions: Thus far shalt thou go and no farther! Considering the nature of the subject, we are willing to be tested by similar methods to those which Mr. Lecky applies to the particulars of general progress.

We concede the defects both of our Science and Practice, but we proudly claim to belong to a profession whose advancement challenges the rivalry of any other under the sunlight.

Albany Medical College.

Dr. Thos. C. Durant of New York, a graduate of the College and an early student of Drs. March and Armsby, has given $15,000 to endow the "*March Professorship.*"

Drs. E. R. Peaslee, and Meredith Clymer, of New York, and Dr. Wm. P. Seymour, of Troy, have accepted Chairs in the Faculty of the College.

Medical Gossip.

THE Archbishop of Armagh sent to Cecil, Queen Elizabeth's Prime Minister, in 1571, this remedy for his gout: "Take two spaniel whelps of two days old, scald them and cause the entrails to be taken out, but wash them not. Take five ounces of brimstone, four ounces of turpentine, five ounces of parmaceti, a handful of nettles, and a quantity of oil of balm, and put all the aforesaid in them, stamped, and sew them up and roast them, and take the drops and anoint you where the grief is, and, by God's grace, your Honor shall find help." (*Froude, Hist. Eng.*, C. XXIV.) The Archbishop was otherwise known as Dr. Lancaster. Indeed, in the olden time, the functions of priest and doctor were often exercised by the same person, which is the probable explanation why it happens that doctors, now-a-days, are usually of a polemical turn, and clergymen love, above all things, to dabble in physic. —— About this same period, (1569,) the English soldiers sent to Ireland suffered grievously from flux, and it is curious to read that it was attributed to the continued eating of fresh beef — the Irish nation at that time living almost wholly on meat, and using but little bread. This was before the introduction of the potato. Throughout history, it is noticeable that all diseases are referred each to some single specific cause. The idea of concurrent causes is as essentially modern as it is correct.—— When the spotted fever prevailed in Virginia, early in the '20's, Dr. Lucas, a practitioner, gave this treatment: (*Am. Med. Recorder*, Vol. V.) Evacuants very cautiously, always directing the patient to take a stiff drink of toddy after each stool. In many cases no sort of evacuation was premised or admissible. Patients took one or two ounces of Bark every one, two, or three hours, and from three to six pints of good rum in the 24 hours. Laudanum was given freely— many taking from eight to twelve drachms. Blood-letting, carried to the extent of producing an impression on the system, was almost uniformly fatal.

"Two stout, strong, athletic men took an emetic of tart. ant.; after puking moderately three times, they were prostrated to the lowest possible degree consistent with life. I found them without a pulse, in a profuse, cold, waxy sweat. The first took 60 drops of laud. in a wine-glass of strong rum, instanter; one ounce of eth. sulph., one of hartshorn, half a one of laud.; two ounces of bark and a pint of rum with 90 grains of camphor, were given him in about an hour; two ounces of bark, three of rum, one drachm of laud., and four of water, were directed to be administered every two hours by injection.

Large plasters of mustard were applied to the extremities, breast and spine, and equal parts of rum and a strong decoction of cyanne tea were given every half hour; this was continued for 48 hours, and in 72 hours he was free from danger. Boiling water was applied before the mustard, to ensure its effects. The other was treated in the same way, except boiling water; both are now well." A lady patient "took, every two hours, two ounces of bark, ten grs. of camphor, ten of vol. alkali, two scruples of laud., and three ounces of spirits, by injection, for 48 to 72 hours, and from 1 to 1½ pints of rum in the 24 hours." She recovered.

—— In the same article he remarks that, "in a similar epidemic prevailing in 1819, 25 to 40 grs. of tart. ant. were required to produce vomiting — cathartics in proportion — and it was about impossible to salivate with mercury. "During this season, Thos. E. Abernathy took, in eight days, nine drachms of calomel, with a proportionable quantity of oil, salts and jalap, without an emetic, cathartic, or sialagogue effect. He recovered on the free use of bark, toddy, and elixir vitriol, and I never could tell what became of the calomel, etc. He had the disease in the dysenteric form." This will do for the sedative action of calomel — see Dr. LENTE. RIVERIUS, quoted by Bonet in 1682, urges, in what was probably the same disease, "blood-letting"— which "the change of type," perhaps, prevented Dr. Lucas from using. *Sic:*

"It is determined, by the wise judgment of Doctors, that when purple spots appear, in the beginning of the disease, and at those days when bleeding uses to be celebrated, if a sufficient quantity of bloud have not been taken away before, even at that time bloud may be taken away in a moderate quantity without any imminent danger; seeing that Eruption, which is in the beginning of the disease, is not critical but symptomatick, arising from the exceeding ebullition of the bloud and the ferment of malignant and putrefying humours: and therefore Nature's motion, which at that time is not, cannot be hindred: for if, when the body is plethorick, and sends out a thick and red urine, you do not let bloud on the score of spots appearing, Nature will scarce be able to conquer so great a quantity of humours, and there will be danger lest they fall upon some inner part, and breed in it a pernicious inflammation."

He also recommends, particularly, opening the Hæmorrhoidal veins by applying leeches to them, which latter seems to us, also, the most appropriate part on which to apply them.—— Henry C. Lea, the eminent medical book publisher, is achieving high reputation as a literary author. His books are quoted in Europe as among the most learned and able which this country has given to the world.——Prof. Richards has been recently delighting popular audiences in various parts of the Northwest by a series of brilliantly illustrated lectures on chemistry. Physicians can do much toward elevating popular taste by encouraging similar attempts to

convey valuable information, whilst at the same time entertaining the people.—— The Foundling Hospital at New York has had over 150 babies left in its basket since last November.—— The *Pacific Journal* says there are eight institutions for the training of idiots in the United States. The largest is at Syracuse, N. Y., and has 150 pupils.—— The most important "vocative" now is the establishment of hospitals for inebriates, and such modification of the laws as will enable friends or the authorities to send the unfortunate victims to them, and to keep them there, *nolens volens.* —— The great specialist, RICORD, who has been on every side of every known professional question, has been officially appointed consulting physician to the Emperor Napoleon.—— Nelaton calls Napoleon's disease "vesical hæmorrhoids," since which valuable news was first announced, we have been consulted by at least a half-dozen old gonorrhœal veterans, who imagine they have the same disease.—— Senator Sumner failed to get the Senate to repeal the charter of the Med. Soc. of the District of Columbia. —— Jas. P. White, M. D., the retiring President of the N. Y. State Med. Soc., in his address, (*Buffalo Journal, March*, 1870,) chronicles the evidences of progress of medical science, and the catalogue should convince the most sceptical that the science is at anything except a stand-still.—— The Hospital question is still on the tapis in Chicago. The leading papers of the city advocate the views, first enunciated in this journal, as to the abandonment of the old castellated structures, though rich in fat contracts and stealings, and the adoption of the modern system. There should be ample spaces set apart in each division of the city for the purpose, cheap and numerous buildings put up, and, what has heretofore been neglected, an efficient ambulance corps organized. By the aid of the telegraph, ambulances could be ordered, when needed, as quickly as the fire engines. The present methods are simply barbarous.—— The *Richmond and Louisville Medical Journal* claims to be the largest medical monthly in the United States. —— The veteran Prof. JOHN W. DRAPER'S miscellaneous works, philosophical and historical, are winning golden opinions and the most flattering notices, both in this country and Europe. As Metaphysicians always used to leave Physiology out of the question, so the Historians have been wont to omit all reference to those great physical influences which so certainly shape the char-

acter of individuals and nations. Prof. Draper's philosophical history of the recent civil war, with its causes and results, when contrasted with the *twaddle* which Mr. Froude uses to fill up the large interspaces of his occasionally brilliant descriptions, reflects honor upon the country, and the profession of Dr. Draper's choice. *L'esprit du corps* at least should make all doctors read his books. —— Six grains of Bicarb Pot. or Sod. added to each quart of fresh milk, before the cream has risen, bottled, tightly corked, and then placed in a water bath, heated to 190 degrees, and not more — the cork then coated with wax — is the Parisian method of preserving milk for a long period.—— The fancy envelopes, green on the inside and white without, are poisonous from arsenite of copper in the coloring matter. *Cave!*——A "Society for the Suppression of Useless Information" is announced.—— Among the most remarkable instances of *ante mortem* beneficence, we see announced that Drs. C. L. Ives and A. S. Munson have given $1,000 each to Yale Medical College.—— Another case of "*Railway Spine*" has been before the Chicago courts. A remarkable peculiarity in this case was the entire absence of those symptoms supposed to be diagnostic of spinal meningitis or myelitis. No febrile symptoms, disorder of respiratory, digestive or defecatory organs, no paralysis of sensation or motion, loss of weight, or physiognomic change. Chicago hopes, with this case, to keep up with New York and its McFarland variety of insanity.—— Ninety to one hundred deaths every week from epidemic small pox in Paris.—— At the University of Zurich it is said the lady students are treated with great courtesy and deference by the males. A Miss Morgan recently graduated with distinction in the departments of Medicine, Surgery and Midwifery.—— A Miss Garrett has lately been appointed one of the physicians of the East London Hospital for children. "The cry is, still they come," (not the children, but the doctresses).—— Speaking of women and children, a case of *ovarian pregnancy* has recently occurred in this city. Death resulted near the third month, rupture of the ovarian cyst occurring with fatal hœmorrhage into the abdominal cavity. We saw the specimen some months since, and were promised a full report, with appropriate illustrations, but from some unaccountable reason we have not yet received the manuscript.—— A few days since, we attended a case of labor, "short, sharp, and

decisive," in which occurred rupture of the trachea, during violent straining efforts, with resulting emphysema of the neck and upper part of the thorax. At one time this was so considerable as to interfere somewhat with respiration, and produce lividity of the face, from obstruction to the return circulation. The trouble is spontaneously abating. We dislike to say much about such cases as these last two, for fear the sex will quit the business of bearing children, and turn doctors, (or doctresses — which is it?) —— To avoid the disastrous tendency toward keeping down excess of population, so much complained of, it is well to recollect that concentrated infusion of digitalis, according to Dr. Besnier, applied in saturated compresses according to the patient's preferences, has been found an encouraging practice in orchitis. Double orchitis very often if not always, endangers subsequent obedience to the commandment, "Multiply," etc.——The question of the possible duration of pregnancy has lately been raised before a British court. Sir James Simpson "qualified" to a case of 310 days. In the case before court, intercourse 301 days before the birth gave the plaintiff £200 damages. Served him right.—— One of our contemporaries objects to the term LOOT, which we affix to the section of the JOURNAL containing valuable plunder from all sources. Clearly it is not "up" in oriental literature. We certainly shall not seek our *loot* from the columns of the secular papers, or "chronicle small beer," practices we might possibly charge upon "one of our contemporaries," were we anxious to say, "You're another!" It is all a matter of taste.—— Phosphorus is recommended in the treatment of psoriasis. It is to be exhibited both internally and externally.—— Moûtre uses for prurigo, suppositors composed of Iodoform and cocoa butter: ℞ Iodoform, gr. xx; Butyr. Cacao. ʒj. M. In suppositors vj. divid. For frictions use a drachm of the Iodoform to the ounce of simple ointment.—— The operation of transfusion is getting frequent. After defibrination of the blood, as practiced by Prof. Freer, the operation becomes almost as si mpleas the hypodermic injection, and nearly devoid of danger. No complicated apparatus is required. Nothing but reasonable care on the part of the operator.

Obituary.

We regret to notice the death, at Menominee, Mich., (March 11th ult.,) of John Murphy, M. D., a graduate of the class, '60

and '61, Rush Med. College. Dr. Murphy enlisted as a private soldier in the 37th Illinois Infantry, but was speedily promoted through the different grades to the Surgeoncy of a corps under General Banks. He served through the entire war, and at its close retired with a brilliant record, but unfortunately, like too many others, with a shattered constitution. Engaging in general practice, he shortly gained general confidence and esteem. The local paper comes to us with its columns dressed in mourning, and an account of the funeral, as conducted by the Masonic fraternity. Every evidence of sincere sorrow was manifested. Peace to his ashes, and honor to his memory.

ILLINOIS STATE MEDICAL SOCIETY, March 22, 1870.
Office of the Permanent Secretary, 181 West Madison St., Chicago, Ill.

The twentieth annual session of this society will be held in Dixon, Lee county, on the third Tuesday in May, 1870, at 10 A. M. The following Committees are expected to report: On the Practice of Medicine, Dr. C. Goodbrake, of Clinton, Chairman; on Surgery, Dr. Moses Gunn, of Chicago, Chairman; on Obstetrics, Dr. Elias Wenger, of Gillman, Chairman; on Drugs and Medicines, Dr. Charles Hunt, of Dixon, Chairman; on Necrology, Dr. J. H. Hollister, of Chicago, Chairman.

Special Committees:—On Criminal Abortions, Dr. DeLaskie Miller, of Chicago, Chairman; on Ophthalmology, Dr. J. S. Hildreth, of Chicago, Chairman; on Pulmonary Tuberculosis, Dr. J. P. Ross, of Chicago, Chairman; on the use of Plaster Paris in Fractures, Dr. R. G. Bogue, of Chicago; on Otology, Dr. Sam'l J. Jones, of Chicago, Chairman; on Arrangements, Drs. Everett, Hunt, Phillips, of Dixon, Dr. J. C. Corbus, of Amboy, and Dr. E. P. Cook, of Mendota; on Medical Education, Dr. N. S. Davis, of Chicago, Chairman.

Secretaries of all medical organizations are requested to send lists of their delegates to the Permanent Secretary as soon as elected. Medical societies are entitled to one delegate for every five members. Any respectable physician unable to attend as a delegate, or permanent member, may attend as a member by invitation, on the recommendation of the Committee of Arrangements.

T. D. FITCH.

Note to the Editor.

[The following note should have been earlier printed. We think Dr. Ames was the first *matriculant* of the College.—Ed.]

Chicago, March 12, 1870.

Prof. J. Adams Allen, M.D., Ed. Chicago Med. Journal—*Doctor:* On reading, in the March number of the Journal, Dr. Ames' address before the alumni of Rush College, I observe a foot-note states: "Dr. Ames was the first graduate of the College." A just regard for the truth of history compels me to correct the error contained in the note referred to. Dr. Ames was *not* the first graduate of Rush College; the undersigned was the first graduate of Rush Medical College. Trusting that a correction of this error will be noted in the Journal, I am, respectfully,

Your ob't servant,

Wm. Butterfield, M. D.

Brainard Medical Society.

The Society met in the Court House, in Winamac, Indiana, April 7th, 1870. Dr. J. W. C. Eaton, read a paper on "Some of the Uses and Actions of Ipecacuanha." Dr. Hoag reported a case of Epilepsia. Dr. Washburn reported a case of Uterine Hæmorrhage, caused by partial detachment of the placenta, complicated with rigidity of the os. Drs. Hoag and Cleland, reported, each, a case of shoulder presentation.

The fourth annual election of officers resulted as follows: J. W. C. Eaton, *President;* I. B. Washburn, *Secretary;* Wm. Kelsey, *Treasurer;* F. B. Thomas, J. B. Hoag, W. T. Cleland, *Censors.*

I. B. WASHBURN, *Sec'y.*

Loot.

On the Acid Dyspepsia of Infants.

By EUSTACE SMITH, M. D., Physician Extraordinary to His Majesty the King of the Belgians, Physician to the Northwest London Free Dispensary for Sick Children, Etc.

Acid dyspepsia is one of the commonest digestive derangements met with in young children, and few infants can be said to escape it altogether. A trifling complaint, and readily recovered from when attended to early and judiciously treated, if neglected it becomes a most serious and obstinate disorder, which may resist all treatment, and may lead to the most extreme emaciation, or even to death itself.

The food taken seems shortly after being swallowed to undergo an acid fermentation; sour gases are evolved, great discomfort is

produced, and nutrition is seriously interfered with. The derangement is usually caused by over-feeding with farinaceous foods. It is too commonly the case that these foods are given in enormous quantities — in quantities greater than any infant with ordinary digestive power can by any possibility assimilate. The reason of this reckless feeding is, partly, the mistaken notion which so universally prevails of the digestibility of these foods; partly, the eagerness with which the child himself will swallow large masses of sop; for the griping and flatulence occasioned by the presence of large masses of starchy matters in the alimentary canal will — if not too severe — excite a fictitious hunger which is not easily appeased. An infant of three or four months old, in whom the secretion of saliva is but lately established, or an infant of yet earlier age, who has no saliva at all, is often fed with a large table-spoonfull of corn flour or other farinaceous powder, boiled with milk or with water, four, five, or even more times in the day. The food lies undigested in the bowels, ferments, and a state of acid indigestion is set up, which does not cease with the removal by vomiting and purging of the cause which has produced it. Even a return to a simpler diet is often insufficient by itself to put an end to the derangement; plain milk and water is vomited sour and curdled, and everything taken into the stomach seems to undergo the same acid change.

As this derangement is so easily excited by improper feeding, even in healthy infants, children whose strength has been already reduced by disease, and whose digestive power is therefore lowered in proportion to the weakness of the whole system, are still more likely to be affected by the same cause. On this account acid dyspepsia is a not unfrequent sequel of acute disease in infants, and may, after apparent convalescence from the primary disorder, lead to death, by the interference with nutrition and by the exhaustion which it so often produces. The diarrhœa, which is a not uncommon sequence of some of the acute specific diseases, as scarlatina and measles, is often primarily excited by this derangement, and is too frequently a cause of death. Severe operations upon the child, such as that for stone in the bladder, may also be followed by the same complication, for anything which lowers the easily depressed general strength reduces also the digestive power, and predisposes to this complaint.

Children brought up by hand are especially liable to this acid dyspepsia, for even when fed upon a suitable diet, carelessness in the administration of the food selected, so that the stomach is overloaded by too frequent or too copious meals, or neglect of the necessary cleanliness, so that they are allowed to take milk which by being put into a sour bottle has already begun to change, will excite this indigestion. Amongst the poor of London, it is not uncommon to find a child brought for medical advice sucking at a

feeding bottle, of which the intensely sour smell at once discloses the cause and suggests means for the relief of the complaint under which he is laboring.

The earliest symptoms of this derangement are due to the uneasiness produced by flatulent distension and griping pains. The infant is restless and fretful, whining and crying, and refusing to be pacified. Large quantities of gas are evacuated, both by the mouth and the rectum, affording at first some relief, and the child becomes quieter until a re-accumulation takes place. At night the griping is exceedingly distressing, and his sleeplessness at this time by the discomfort it occasions to his attendants, is usually the symptom which assumes the greatest prominence in the mind of the mother, and is the chief reason for applying for advice. The infant, after lying for a time in uneasy sleep, starting, twitching, moaning, frowning, and drawing up the corners of his mouth, suddenly wakes up with a loud cry, and is seized with a fit of violent screaming which resists all efforts to calm him. He throws himself from side to side, jerks about his lower limbs, or suddenly straightening them out in a line with his body, becomes for a few moments rigid as if turned into stone. These attacks of colic are sometimes so severe as to cause great alarm; the child falling into a state of collapse, or being thrown into convulsions, which may be repeated again and again. The ravenous appetite noticed in children suffering from flatulence has already been referred to. This symptom usually disappears as the derangement becomes more marked. Vomiting comes on after a time, the appetite then fails, and the child is thirsty and feverish. Vomiting is at first excited by taking food, but may afterwards occur when no food has been lately taken, and in bad cases may be caused by a sudden movement, or even by a touch, as in wiping the mouth. The vomited matters consist at first of food and curdled milk, afterwards of clear fluid like water; the smell is usually intensely sour. The bowels at first are confined, but after a time diarrhœa comes on, the motions being either pale, frothy, and sour-smelling, or watery and fetid. There may be straining during the passage of a stool, in which case the motions may contain streaks of blood. An eruption of red strophulus, covering the body and arms of the child, is a not uncommon symptom; it may be mixed with urticaria.

An infant suffering from this derangement soon becomes pale and thin. His face assumes a constant expression of fretfulness, which is increased by the furrow which appears, passing on each side from the nose, to encircle the corner of the mouth. The lower eyelid and upper lip are disposed to be livid; the lips twitch, and the corners of the mouth are frequently drawn up, giving a peculiarly plaintive and helpless expression to the face. The fontanelle is depressed more or less deeply, according to the degree to

which the strength is reduced. The eyes sometimes assume a fixed stare, while the muscles of the face twitch, and the thumbs are drawn inwards upon the palms of the hands. These nervous symptoms — well known to nurses by the name of inward fits — are of importance, as being sometimes the forerunners of convulsions. The tongue is at first covered with white fur, through which red papillæ project; afterwards it is apt to become pale and clean, or with little patches of fur scattered here and there over the dorsum. In bad cases the whole body has an offensively sour smell. This smell proceeds not only from the breath, but from acidity of all the secretions; the saliva, the perspiration, and the urine being all intensely acid. The cutaneous secretion is, however, seldom in excess; more usually the skin is dry, and is in consequence harsh and rough to the feel, especially at the backs of the arms and the belly. The feet are generally cold, and the child lies with the knees drawn up to the abdomen. The coldness of the feet is no doubt one cause of the griping pains which are so constant in this derangement, for even in healthy infants abdominal pains are frequently excited by coldness of the feet, and cease when these are warmed. During the earlier periods of this disorder the complexion turns slightly yellow from time to time, the yellow tint remaining for some hours or days. Occasionally the skin becomes completely jaundiced. After the complaint has existed for some time a peculiar earthy tint is noticed of the face and whole body, which is very characteristic of chronic abdominal derangement.

If the disorder is primary, and is not soon arrested, a chronic catarrh of the stomach is often set up, the bowels becoming obstinately confined, and the vomiting continuing as a persistent condition. In other cases, again, the derangement may settle principally upon the bowels, leading to a chronic diarrhœa. The most extreme emaciation is often reached through these means, and it may be only after weeks, or even months, of illness that a termination, by recovery or by death, is arrived at.

When the disorder is secondary to some acute disease, or follows a serious operation, the strength is usually so much reduced by the original illness that the child, weakened more and more by the vomiting and diarrhœa, and by his inability to digest any nourishment whatever, soon becomes exhausted. Thrush appears upon the inside of the mouth, and the child sinks and dies. Pneumonia is a not uncommon complication in the later stages of the disease, and, if the strength be much reduced, may exist without manifesting its presence by any of the usual symptoms. There is no cough, and the heat of the body is not appreciably heightened, or if heightened at first, the elevation of temperature soon passes off. This pneumonia usually attacks the bases of both lungs.

The earlier treatment is commenced in this derangement the

more readily will the complaint be arrested, for as the strength becomes more and more reduced, and the stomach and bowels become more and more disordered, treatment which in an early stage would be at once attended by improvement loses much of its efficacy, and great difficulty is experienced in making any impression upon the disease.

When the case is seen early, and the symptoms complained of are merely griping and flatulence, with ravenous appetite, unaccompanied by sickness or diarrhœa, careful inquiry should at once be made into the diet and general management of the infant. It should be explained to the parents that the appetite will best be satisfied, not by increasing the quantity of farinaceous matter and the frequency of the meals, but by carefully adapting the food supplied, both in quality and quantity, to the digestive power of the child, so that the nourishment given may be only such as the stomach is able to digest. This may seem a simple and self-evident proposition, but it is one which is constantly forgotten. That a child will be nourished in exact proportion to the amount of food he swallows, and that the more solid the food the greater its nutritive power, are two articles of faith so firmly settled in the minds of many mothers that it is very difficult indeed to persuade them to the contrary. To them wasting in an infant merely suggests a larger supply of more solid food — every cry means hunger, and must be quieted by an additional meal. It is difficult to lay down precise rules for diet in every case of this derangement. This is a matter which can be properly learned only by experience. There are, however, certain plain rules which should always be observed. Of these one of the most important is, that farinaceous food is unsuitable to an infant under the age of three months. Before that age he should be restricted entirely to the breast, supposing that the secretion of milk be of proper quality and be supplied in sufficient quantity. In cases, however, where additional food has to be given on account of the insufficient supply of breast milk, recourse must be had to cow's milk, or to the milk of the ass. If cow's milk be used, it should be diluted with a third part of lime-water, in order to prevent the too firm coagulation of its casein. Even, however, when thus diluted and alkalinized, the cow's milk is sometimes undigested by young infants, who seem to thrive better upon the milk prepared with a very small quantity of arrow-root or baked flour. This scarcely accords with the statement made above, of the unsuitability of such foods to young infants; but an explanation of the seeming contradiction is found in considering the action of the farinaceous food under such conditions. The arrowroot itself probably contributes little, if anything, to the nutrition of the body, but when thus intimately mixed with the cow's milk it has a mechanical action in separating the casein into minute portions. The curd, therefore, coagulates, not in one large

clot, but in a multitude of small clots, which are more readily attacked by the digestive juices. It is, however, as has been said, always a risk to give farinaceous food to young infants, and the same object may be as readily effected, and without any danger to the child, by adding a small quantity of isinglass or common gelatine to the diluted milk, in the proportion of one teaspoonful to four ounces.

In older children, brought up upon artificial food, the above symptoms are often complained of, even although the quality of the food with which they are supplied leaves nothing to be desired. In these cases it is the quantity which is in fault; the child is supplied with food largely in excess of his wants or his powers of digestion, and the stomach and bowels revolt against the burden imposed upon them. For an infant of six months old, one, or for a very robust child, two, teaspoonsful of farinaceous food, carefully prepared with milk, and given twice in the day, are as much starchy matter as he is able readily to digest. His other meals should be composed of milk and lime-water, or the milk and water with isinglass, as directed above.

The kind of farinaceous food is of some importance. Different foods vary very much in the proportion of their several constituents, and the albumen, gluten, salts, etc., they contain, are to be considered quite as much as the starchy matter. The very best food is, perhaps, pure wheaten flour slowly baked in an oven till it crumbles into a light grayish powder. This, prepared with milk, and sweetened with milk sugar, forms an admirable morning and evening meal. It may be varied occasionally with other farinaceous articles, but whatever be the food selected, the quantity mentioned must not be exceeded. On alteration in the diet, in accordance with the above rules, a small dose of castor-oil, or rhubarb and soda, to clear out undigested matter from the bowels, and the administration of a little bi-carbonate of soda or potash, with an aromatic to neutralize any remaining acidity and promote digestion, are all the measures that are required at this stage.

If the derangement have gone on to vomiting and purging, with an intensely sour smell from the breath and from the ejected matters, other means must be resorted to. In this case the stomach and bowels are filled with the acid products of fermentation, and the vomiting and diarrhœa are merely the forcible efforts of the alimentary canal to expel its irritating contents. Sedatives to the stomach and astringents to the bowels are here out of place; we shall best cure the derangement by assisting the expulsion, and not by obstructing the exit of the fermenting food. In determining, however, the exact measures to be adopted, the state of the child's strength is an important consideration, and this is best estimated, not by the condition of the pulse, but by the degree of depression of the fontanelle. If the fontanelle is not much hollowed, a tea-

spoonful of ipecacuanha wine should be at once administered, and should be repeated every ten minutes until vomiting be produced. The acrid matters in the stomach having been thus evacuated, half a teaspoonful of castor-oil should be given after a short interval, to act gently on the bowels, and the child should be allowed nothing but a little cold, thin barley-water, given occasionally, with a teaspoon. At the same time the belly should be kept covered with a hot linseed-meal or bran poultice, and the child warmly wrapped up should be kept perfectly quiet in his little cot.

If the derangement have only existed a short time, the above measures will be usually successful in checking the symptoms, and the child will be found to retain the breast milk, or the milk and water with which he is supplied in small quantities. Any tendency to acid fermentation that may remain should be neutralized by five-grain doses of bi-carbonate of soda, given three or four times a day, and the patient may be allowed to return very gradually to his ordinary diet.

When, however, the derangement is of long duration, or is secondary to a severe operation or to some acute disease, the symptoms are not so easily overcome. Here the weakness, as shown by the depressed fontanelle, will not allow very active measures to be employed, and therefore the accomplishment of our twofold object, viz., of removing already formed acid from the system, and of preventing further fermentation, requires the most careful management. Emetics are here out of the question, for the strength will not bear further reduction, and the administration of such a remedy would be attended by the greatest danger. Our first care should be to endeavor to restore the circulation to the extremities, by placing the feet as high as the knees in hot mustard and water. If the weakness be very great, the whole body may be immersed in a mustard bath as high as the neck. It is of extreme importance in such cases to restore the proper action of the skin, for it is by this means, chiefly, that we hope to effect the escape of acid from the system. On being removed from the bath the infant should be carefully dried; a hot linseed-meal poultice is then to be applied to the belly, and the child, well wrapped in flannel, must be returned to his cot. The warmth of the surface must be kept up by hot bottles placed by his sides, and the feet and legs should be well rubbed at intervals with the hand alone, or with a liniment composed of equal parts of compound soap liniment and the compound liniment of camphor. If the child can bear the motion, frictions with the same embrocation may be used to the whole body; but in cases where the weakness is extreme and the vomiting obstinate, violent retching may be excited by the slightest movement, so that the frictions would have to be discontinued. In such cases the feet and legs should be wrapped in hot flannels on which some flour or mustard has been sprinkled, and

the most perfect quiet should be enforced. A napkin must be placed under the chin, to receive all matters ejected from the stomach, and when moistened the cloth must be immediately removed and a clean one applied in its place.

If diarrhœa exist, astringents are not to be employed so long as a sour smell from the breath and evacuations indicates the continuance of fermentation in the stomach and bowels. For a child of a year old, twenty drops of castor-oil can be administered, and will be usually kept down. After its action a simple chalk mixture may be given, or a draught containing five grains of bi-carbonate of soda, with three grains of nitrate of potash, in some aromatic water, three or four times in the day. Half a drop of tincture of capsicum is a valuable addition to each dose of this mixture.

If there be constipation, the bowels must be opened by an enema containing castor-oil, and be kept in regular action by the occasional administration, as required, of one or two drops of a solution of podophyllin in alcohol (a grain to the drachm), or by suppositories of castile-soap placed in the rectum.

The form of nourishment to be given in these cases is of the utmost importance. All matters capable of undergoing fermentation must of course be excluded. Even milk itself, however diluted and alkalinized, can seldom be borne, as it is usually vomited sour and curdled immediately after being taken. Woman's milk is usually well digested, but not always. In some cases it seems to agree as little as the milk of the cow; in others, where the irritability of the stomach is very great, the mere movement of the mouth in the act of sucking may be sufficient to excite a return of the vomiting. If this be found to occur, the breast milk should be given with a teaspoon. In cases where a return to the breast is impracticable, or is not followed by the expected improvement, a good food is whey, made fresh as required, by adding prepared rennet to cow's milk in the proportion of a teaspoonful to the pint. To two tablespoonsful of the whey add one tablespoonful of fresh cream, and dilute with two tablespoonsful of hot water. Of this food small quantities can be given at regular intervals, and care must be taken that it be either hot or cold, but not tepid, as liquid food given in a lukewarm state would be apt to favor a return of the vomiting. Liebig's food for infants, carefully prepared with freely diluted cow's milk, will often be borne; but in very bad cases it is inferior to the diet just described. In addition, the waning powers of life must be supported by five-drop doses of pale brandy, given in a teaspoonful of the food every hour, or even oftener, according to the condition of the fontanelle.

By such measures success is often attained even in the very worst cases of this derangement. The obstinate vomiting is best arrested not by sedatives, but by giving the stomach as much rest as is consistent with supporting nutrition. Of all special drugs,

calomel in doses of one-eighth or one-sixth grain, laid dry on the infant's tongue, is, perhaps, the one which is the most generally successful; but our chief reliance should be placed on a careful diet, and on stimulating and hot applications, so as to promote the circulation and encourage the free action of the skin. The existence of cold feet alone would be a sufficient obstacle to the success of any treatment whatever.—*American Journal of Obstetrics, Etc.*

Note on the Value of the Wheat Phosphates in Therapeusis.

By J. S. HAWLEY, M. D.

THE researches of modern physiologists have fully demonstrated the importance of inorganic principles in nutrition. For example, however rich in fibrin and albumen the blood may be, it is not properly constituted, nor can it carry on its life-giving functions, without the presence of the salts of iron, soda, and lime. Among these salts stand pre-eminently the phosphates.

Among the early and successful investigators in this field was M. Mouries, who arrived at the following conclusions:

1st. That phosphate of lime plays a more important part in nutrition than has heretofore been believed. Independently of its necessity as a constituent of bone, this salt maintains that irritability without which there is no assimilation, and consequently no nutrition.

Its insufficiency therefore produces death, with all the symptoms of inanition, while its insufficiency in a less degree produces a series of lymphatic diseases.

2nd. The food consumed in cities is deficient in this respect, and nurses' milk has consequently the same defect. The infant suffers from the deprivation of this element so indispensable to its development and life. Hence one of the causes of the increase of the mortality of infants.

3d. *The addition of this salt, in combination with animal matter, to alimentary substances, obviates one cause of disease and death.*

These conclusions were arrived at as the result of a large number of well directed experiments and careful analyses of alimentary substances. He further demonstrated the existence of a constant relation between the animal heat and the amount of phosphates in the blood, from which he deduces the principle that these salts keep up animal irritability, without which nutrition is impossible.

The following is the testimony of Dr. Tilbury Fox, not merely to the value of the phosphates in nutrition, but of the great superiority of the natural over the artificial phosphates.

"There is something *essentially special in the Organized phosphates, those, in fact, which have been formed by passing through a living organism, as compared with those artificially prepared.*

It is not the *amount* but the *kind* exhibited which produces the good result. In infants' food, and in our bread and flour, the organized phosphates and cerealin (which has a somewhat similar action to pepsin) have been deliberately rejected. *These may be administered medicinally to children and infants when the assimilative function is at fault.* In eruptive diseases of the scalp (which are generally associated with faulty assimilation), in rickets, marasmus, chronic diarrhœa, and impaired nutrition of all kinds, the *Wheat Phosphates* act marvellously. Pallid children pick up tone, color, and flesh; worms disappear, the secretions become healthy, and disease goes."

But it is not altogether necessary to look abroad for written testimony to the value of the organized phosphates in alimentation.

The following is an extract from remarks before the New York County Medical Society, by Prof. A. Jacobi:

"The evils of inanition receive marked illustration in practice among children. As an instance of the chronic starvation of special tissues, might be mentioned rachitis, a disease exhibiting defective nutrition of the osseous and muscular systems. The proportion of phosphate and carbonate of lime (chiefly phosphates) in the bones of infants is 60 to 63 per cent.; while in rachitic children, and particularly in rachitic softening of the cranial bones, it falls as low as 50 and even 20 per cent. *The lack of these elements* is most probably due to excessive elimination; we cannot stop this, and must meet it by an *increased supply*. Experience has shown that *a diet rich in phosphates* will often, without medicine, effect a marked improvement.

The following illustrates, in an important particular, the superiority of the natural over the artificial phosphates:

M. Andrè Lauson, in a paper read at the Academy of Medicine, (*Gazette Médicale*, August 14th, 1869), calls the attention of French surgeons to the fact that to promote osseous growth, the administration of phosphate of lime, either in the shape of hypophosphites, or in that of powdered bone, is unavailing. Several attempts made with these substances have never been successful. It is because their form does not allow of their digestion and assimilation. On the contrary, *earthy phosphates, such as are elaborated by vegetables, are real aliments.* Now, wheaten flour contains but ·4 per cent. of phosphoric acid, and ·02 per cent. of carbonate of lime; in wheat bran, on the contrary, we find 2·5 per cent. of phosphoric acid, and ·11 per cent. of carbonate of lime.

Pure flour is, then, deprived of its phosphates to a great extent, and the bread made with it is not the proper aliment for the patients referred to in this article."

The above quotations abundantly exhibit the value of wheat phosphates in nutrition. These phosphates are abundant in the bran of wheat, may be easily extracted and reduced to a flour, and

thus become a *medicinal food* which will supplement in an important particular the ordinary food upon which infants and children are fed.

It would be useful, as appears from the above extracts, in all cases of inanition, to the offspring of scrofulous patients, in whatever condition of life, and especially to that large class of illy nourished children of poverty found in asylums and hospitals.

The intelligent practitioner would frequently be relieved from embarrassment in his attempts to nourish his feeble and emaciating patients, by having within his reach an available and convenient form of wheat phosphates.

It may be said that a much simpler method of arriving at this point would be to use unbolted flour for the food of such patients as require a diet rich in phosphates. Doubtless such a course would be judicious and useful to the patient. But most of the foods furnished for children are deprived of phosphates, and the article in question would afford an easy and ready means of restoring them and of regulating the quantity. Besides, it is no easy task to overcome a fixed and universal custom, while it is both easy and convenient to prescribe a remedy in those cases where it is indicated.

Greenpoint, L. I.

*** It may not be without interest to note in this connection and in answer to some of the opponents to the use of the wheaten phosphates in alimentation, that Mr. F. Crace Calvert, in a paper read before the British Association, (*Chemical News*, Am. Rep., Nov., 1869,) has stated that "most of the phosphates contained in wheat are not combined with the organic matter, but are in a free condition." (ED. GAZETTE.)

—*Medical Gazette.*

Local Treatment of Croup by Lactic Acid.

A KNOWLEDGE of the power possessed by lactic acid to dissolve fibrinous exudations induced Dr. Adolph Weber to try it in cases of croup. At first he used it only after the operation of tracheotomy, partly with a view to keep the tracheotomy tubes clean, and partly hoping that the lactic acid might affect the membranes which extended downwards into the bronchi. The results were so favorable in both respects that he proceeded to try it in severe cases of croup before having recourse to tracheotomy. Since then he has not once had occasion to operate, and has not lost a single case of croup. In some very severe cases in which inspiration and expiration were equally obstructed, and the condition of the faucus indicated an abundant fibrinous exudation in the trachea, the difficulty of breathing was completely relieved within seven to ten hours of using this remedy, and two or three days after, no trace of the local affection remained.

During the treatment there was not, as is generally the case, an expectoration of tough membranous sputa, but gradually the

whistling, barking inspiration and expiration were replaced by distinct rattling noises; the voice, before quite suppressed, began to assume a hoarse timbre, and considerable quantities of loose, white, frothy phlegm were expectorated during the fits of coughing, until at last the struggle for breath quite ceased, and the disease assumed more the character of a catarrhal affection of the throat.

The treatment consists in the local application of the remedy to the windpipe by means of inhalation. The patient is made to inhale a solution of lactic acid (15 to 20 drops in half an ounce of water) at first every half hour, and afterwards, when the respiration improves, every hour or every two hours a solution of 10 to 15 drops in half an ounce of water.

The inhalation is discontinued as soon as the dyspnœa has subsided, and to promote expectoration chamomile tea is exhibited.

In using the inhalation, care must be taken that the vapor does not affect the eyes or face.

With this treatment was conjoined the internal exhibition of carbonate of soda every half hour or every hour, which was thought to exert a beneficial effect upon the exudation.— Med. Times & Gaz., Jan. 22, 1870.—*Med. News.*

Diet in Certain Surgical Cases.

It is now many years since the extirpation of bone with a view to its reproduction by means of the periosteum was first practiced, and it is now a tolerably frequent operation. In the *Abeille Médicale*, M. André Sanson gives his brother surgeons a hint as to the diet most suitable to patients under such circumstances, so as to hasten their complete recovery. In zootechny, it is by particular kinds of food that the maturity of cattle is hastened. The fodder which is richest in calcareous phosphate is the best suited for the purpose, because that is the chief constituent of bone. The seeds of graminacous, leguminous, and oleaginous plants are given with this view to the young animals, which thus, as it were, become older than their real age. To apply this principle to man is now the question. The food of cattle being, of course, unsuited for the human race, we must examine what alimentary substances fit for it will best answer the purpose of favoring the reproduction of bone. Now beans, peas, lentils, and such like leguminous seeds, contain upwards of 0·85 per cent. of phosphoric acid, and are therefore to be recommended as the best diet in cases of the above description. Bread, which is such an important element of food in France, requires to be specially mentioned. We have often stated in these columns that the whitest flour, although so pleasing to the eye, is far from being the most nutritive. Wheat flour does not contain more than 0·40 per cent. of phosphoric acid, and

0·02 of lime; that of rye, on the contrary, possesses 0·70 of the former, and 0·05 of the latter; but the bran of wheat contains as much as 2·50 of the one and 0·11 of the other; so that flour of the first quality is deprived of the greater part of its phosphate. Hence, patients in whom the regeneration is to be promoted, ought to eat brown bread in preference to white. This is a far better plan than endeavoring to introduce phosphates into the economy in their mineral state.— Galignani.— *Med. Gazette.*

The Sulphited Phosphate of Lime.

PHOSPHATE of lime, in whatever state it may be, dissolves readily in an aqueous solution of sulphurous acid. The solution has the taste and smell of the sulphurous acid, but greatly diminished in intensity. A boiling heat slowly decomposes the solution, sulphurous acid escapes, and a heavy white crystalline precipitate is formed, which, when washed and dried over sulphuric acid, is found to have the formula, $3\,CaO, P^2O^5, SO^2, 2H^2O$. This sulphited phosphate of lime has no smell or taste, and is distinguished from all other sulphites by its stability. Even when heated for several hours up to 266 degrees Fahrenheit, it is not decomposed. But though it withstands the action of the atmosphere indefinitely, it is rapidly oxidized when mixed with the soil. It acts, in that case, as a soluble phosphate of lime, and a trial of several seasons has proved it to be an excellent manure. It has also remarkable antiseptic and disinfecting powers, and its physical properties recommend it strongly for these purposes. It is a clear white powder, which stains and soils nothing, and can be brushed off from carpets and garments, leaving no mark; it is free from smell and taste, and harmless to animal life. Its harmlessness and freedom from taste and smell suggest its being tried in therapeutics, where it may prove a valuable agent.

The solution of phosphate of lime in sulphurous acid also acts as a disinfectant, and in some cases with even more energy than the powder. It may be used to advantage in places where a liquid can be more conveniently applied than a solid.— *Boston Journal of Chemistry.*

Nephrotomy.

ON Thursday, Feb. 3, the operation of cutting into the kidney for removal of renal calculus was performed by Mr. Durham, at Guy's Hospital. The theatre was crowded with students and others anxious to see so rare an operation. We believe, indeed, that there is only one instance of its performance recorded, and that was by a surgeon of Venice, upon an Englishman, some hundred and fifty years since. Two or three stones were then extracted, to the great relief of the patient, a urinary fistula remaining in

the loin. Owing, doubtless, as much to the uncertainty of the diagnostic signs of renal calculus as to the supposed risks of the procedure, the operation fell into oblivion, until a paper read before the Medico-Chirurgical Society last year, by Mr. Thomas Smith, of St. Bartholomew's Hospital, again brought the subject before the notice of the profession. Although Mr. Durham's bold attempt ended in disappointment, we saw enough to convince us that as far as cutting down upon the kidney is concerned, there is neither great difficulty nor any apparent grave risk in the proceeding. Mr. Durham made his incision along the edge of the erector spinæ, from the pelvis to the eleventh rib, and quickly reached the hilus of the kidney without difficulty, and with little or no loss of blood, but no stone was found, although the symptoms previously manifested had been such as are considered characteristic of stone in the kidney. The hilus of the kidney and the ureter, for the space of an inch and a half, were thoroughly examined, but not opened, no stone being felt, and their general appearance, as well as that of the kidney, being perfectly healthy. So far from the operation having been injurious, five days later the woman expressed herself as being more free from pain than she had been for a long time! Full details of the case will be published whenever it may be considered to have terminated, whatever the termination may be.—Med. Times & Gaz., Feb. 12, 1870.—*Med. News.*

Iodine in Intermittent Fever.

Professor Willebrand, of Helsingfors, has, in certain forms of the disease, successfully used the following: R. Iodine, gramme j; pot. iod., gramms ij; aq. distil, grammes x; M. S. Five drops given in water every two hours. Relapses seldom occur, as in the use of quinine. Iodide of iron, in doses of ten centigrammes, four times a day, for cachexia and anæmia.—*Archives Generales.*

Surgery of the Hip-Joint.

Mr. William Adams has divided subcutaneously the neck of the thigh bone within the capsular ligament, by means of a fine saw. This is a great triumph of subcutaneous surgery, as the case is doing well.—*Med. Press and Circular.*

Sir Duncan Gibb

Attributes the diminished longevity of the Jews to the persistent use of olive oil for culinary purposes, resulting in what he terms a "*Sanguineo oleaginous expression*," pendency of the epiglottis, premature decrepitude, and a tendency to death from congestive disease.—*Med. Bulletin.*